

PSYCHOLOGICAL ABSTRACTS

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GENERAL

1. Baur, E. *Psychosynthese*. (Psychosynthesis.) Bern: Selbstverl., 1932. Pp. 149. M. 4.00.—R. R. Willoughby (Clark).
2. Bellows, R. M. The psycho-genetic relationship. *Human Biol.*, 1932, 4, 280-285.—A critical endeavor to relate the data of genetic psychology with those of behaviorism, especially for learning in the idiot-savant type of human being.—O. W. Richards (Yale).
3. Beth, K. *Chronik psychologischer Forschung und Arbeit*. (Chronicle of psychological research and work.) *Zsch. f. Religionspsychol.*, 1931, 4, 38-41.—A. Römer (Gautschi bei Leipzig).
4. Boring, E. G. Max von Frey: 1852-1932. *Amer. J. Psychol.*, 1932, 44, 584-586.—M. N. Crook (University of California at Los Angeles).
5. Canella, M. F. *Trasformismo e teratologia. Saggio di relativismo biologico*. (Transformism and teratology. Essay on biological relativism.) Bologna: Zanichelli, 1932. Pp. 60.—The finalistic interpretation of biological phenomena is irrational and contrary to the contradictory, absurd and disharmonic facts which are constantly being discovered in studies of morphology, physiology and psychology, both animal and human. The concept of normality of forms and functions is wholly relative to special conditions, tastes and habits; all animal forms and all human constitutions are normal if they have the possibility of exercising vital existential functions. If we accept the theory of transformism and recognize the relativity of the concept of species, and admit the inheritance of variations, the concept of monstrosity has no longer any significance; anomalies and variations may be considered in the same way. Even more absurd is the idea that monstrosity lies in ugliness and strangeness of outward appearance, instead of in the real impossibility of preserving and reproducing life. We must also observe that abnormality has nothing to do with disease, that there are no normal limits of variation, that there are numerous examples of anomalies immediately fixated in heredity, and that there is nothing absurd in considering anomalies as points of departure for new species. The genesis of monstrosities repeats its causes in the physico-chemical constitution of the protoplasm and shows that living matter is not bound, in its development, to a determined form or Platonic prototype; the doctrine of preformation must, logically, yield to the objective statement that metabolic processes are all that we know of the development and vital manifestations of organisms. In the last chapters, the writer presents the theories of the biologist, Rabaud, and the naturalistic philosophers, J. B. Robinet and J. G. Saint-Hilaire, and shows the relations between their theories and his own.—R. Calabresi (Rome).
6. Carmichael, L. Scientific psychology and the schools of psychology. *Amer. J. Psychiat.*, 1932, 11, 955-968.—The author reviews, briefly, the contributions of the various schools of psychology: existential or structural; behaviorism; motor psychology systems; Gestalt; psychoanalysis; purposivism. He concludes that while "systematic points of view differ, experimental psychologists understand each other," and "it is the knowledge of human nature and not the systems for organizing this knowledge that is important." Quoting Boring, he agrees that the application of the experimental method to mind has been the outstanding event in the history of the study of the mind, and adds that the practical experimental attacks on problems in psychology have done much to break down the divisions between the schools.—S. J. Beck (Boston Psychopathic Hospital).
7. Dodge, H. L. [Ed.] Abstracts of theses. *Univ. Okla. Bull.*, 1931, N. S. No. 501. Pp. 106.—This bulletin presents abstracts of theses for higher degrees in the Graduate School of the University of Oklahoma for the year 1930, with an appendix giving titles of theses prior to 1930.—M. O. Wilson (Oklahoma).
8. Driesch, H. *Moderne Psychologie*. (Modern psychology.) *Zsch. f. Religionspsychol.*, 1931, 4, 20-25.—A. Römer (Gautschi bei Leipzig).
9. Fernberger, S. W. The accuracy of phase cycles in a commercial electric current. *Amer. J. Psychol.*, 1932, 44, 582-583.—Accuracy of the cycle rate of the 60-cycle current supplied by the Philadelphia Electric Company was determined from the company's graphic records. The largest deviation was found to be below the sensitivity of the Dunlap chronoscope.—M. N. Crook (University of California at Los Angeles).
10. Greene, E. B. Two circle grid charts for measuring visual acuity and astigmatism. *Amer. J. Ophth.*, 1932, 15, 716-721.—This paper deals with the evaluation of test charts under the following heads: (1) the variable factors in a test situation; (2) the specifications for an ideal series of test objects; (3) the description of two grid charts made to meet these specifications; and (4) summary.—R. J. Beitel, Jr. (Clark).
11. Guilford, J. P. Experimental studies in psychology. A manual and workbook for students. Ann Arbor: Edwards, 1932. Pp. 164. \$2.75.—A manual of experiments and demonstrations for use in connection with an introductory course in general psychology, in problem form, and designed to integrate especially with Woodworth's *Psychology* as a

text. Each problem is preceded by a few relevant paragraphs outlining the historical setting or the rival theories suggested by the problem, and space is provided for the systematic recording of results and for comments and conclusions. Most of the experiments are the usual exercises in experimental psychology. References are included at the end of each problem. A rather good complement of apparatus is presupposed.—L. A. Averill (Worcester State Teachers College).

12. Hassler, J. O. [Ed.] List of publications of faculty members of the University of Oklahoma from 1929 to 1931. *Univ. Okla. Bull.*, 1931, N. S. No. 498. Pp. 22.—M. O. Wilson (Oklahoma).

13. Heun, E. *Erkenntnislehre und Psychoanalyse. Grundlagen einer anthropologischen Erkenntnislehre.* (Theory of knowledge and psychoanalysis. Foundations of an anthropological theory of knowledge.) *Zentbl. f. Psychotherap.*, 1932, 5, 323-333.—This is one of a series of articles in which the writer attempts to show the relationship of Jaensch's "transcendental perspectivism" to problems of psychotherapy. Heun finds that Jaensch's studies of psychological *Struktur* represent an extremely fruitful way of explaining in terms of natural science the various attitudes of men toward the world and also their various world-pictures. Jaensch's doctrine of integration is the complement of the type of investigation carried on in depth psychology. The writer accepts Müller-Freienfels' distinction of subjectifying and objectifying psychologies, and maintains that all theories having significance for psychotherapy belong to the subjectifying trend, i.e., emphasize the relatedness of mental phenomena to the self.—C. W. Fox (Rochester).

14. Kelley, T. L. *Scientific method.* New York: Macmillan, 1932. Pp. ix + 233. \$1.50.—A series of nine lectures, entitled *Interrelationship Between Method of Research and Field of Investigation, The Role of Judgment in "Objective Measurement," What Purposes are Served by Scales of Mental Measurement?, The Objective Measurement of the Outcomes of the Social Studies, The Scientific versus the Philosophic Approach to the Novel Problem, A Defense of Science in Education, The Conference Method of Finding the Truth, The Bearing of Recent Scientific Development upon Problems of Education and Inheritance, and Mental Traits of Men of Science.*—R. R. Willoughby (Clark).

15. King, C. D. *The psychology of consciousness.* New York: Harcourt, Brace, 1932. Pp. xv + 256. \$3.75.—A presentation of the psychonic theory of consciousness with a discussion of the nature of the "I." "To summarize briefly, the phenomena of consciousness and those of synaptic function in the conduction of the nerve-impulse correspond, point for point, in their most prominent characteristics. It is at the synapses that the nature of each Unit Response is determined and here also, due to the attributes of the synapse, a more intense form of energy appears than elsewhere in the human organism. Since their

respective characteristics are identical, it would seem that the nature of psychonic energy corresponds to that of consciousness, and thus that psychonic energy is consciousness."—W. S. Hunter (Clark).

16. Klages, L. *Goethe als Seelenforscher.* (Goethe as a psychologist.) Leipzig: Barth, 1932. Pp. 94. M. 3.60.—R. R. Willoughby (Clark).

17. Lillie, B. S. *The directive influence in living organisms.* *J. Phil.*, 1932, 29, 477-491.—Experimental evidence seems to show that the behavior of single electrons is only partially controllable from outside, the inference being that behavior results in part from internal, unobservable factors which operate independent of immediate external conditions. Individual factors may therefore enter which are not subject to any known rule, or, in the case of emergents, not subject to any pre-existing rule. This would imply the absence of complete mechanical determinism even at the physical level. Events exhibit a conjunction of permanent, controllable conditions with spontaneous, individual, non-repetitive factors. Directive influence appears in highly developed form in living organisms. By assuming directive action originating in the intra-atomic influence of "key-atoms" we can understand how it is transmitted and intensified. Local bio-electric circuits, such as are known to exist at the surfaces of protoplasmic membranes, could activate large areas, producing large-scale effects. Such a theory would suggest a modified form of the monad theory of Leibniz. The ultimate natural units would possess originative and directive influence manifested at intervals, and also the power of interaction and inter-determinism. Physiological technique fails to touch the former, but might be supplemented in the case of humans by a carefully controlled technique of introspection, psychology lending aid to the biological sciences.—E. T. Mitchell (Texas).

18. Lindworsky, J. *Theoretical psychology.* (Trans. by H. R. DeSilva.) St. Louis: Herder, 1932. Pp. viii + 145. \$1.25.—An attempt to develop a theoretical system of psychology. The book is divided into two sections: *The Laws of Content* and *The Laws of Process*. The author classifies the laws of content and process and the basic qualities of experience. There is a criticism of the psychology of G. E. Müller and of the Gestalt group of psychologists.—N. L. Munn (Pittsburgh).

19. Perrin, F. A. C. *Psychology: its methods and principles.* (Rev. ed.) New York: Holt, 1932. Pp. xii + 336. \$2.00.—The present book is a revision of Perrin and Klein's *Psychology*. It differs from the former book in following an eclectic point of view and in placing special emphasis upon the integrative aspect of behavior.—W. S. Hunter (Clark).

20. Petermann, B. *The Gestalt theory and the problem of configuration.* (Trans. by M. Fortes.) New York: Harcourt, Brace, 1932. Pp. xi + 344. \$4.50.—A translation of *Die Wertheimer-Koffka-Köhlersche Gestalttheorie und das Gestaltproblem.* See III: 4691.—R. R. Willoughby (Clark).

21. Richards, A. Science, education and the museum. *Proc. Okla. Acad. Sci.*, 1930, 10, 7-12.—The larger function of the museum is to carry on a program of research and publication. Another important function is to promote a better understanding of scientific results on the part of the people as a whole. It is hoped that the time will soon come when young people of Oklahoma may share in those opportunities which are now available to those of older states and of the more advanced countries of Europe.—M. O. Wilson (Oklahoma).

22. Richards, I. A. *Mencius on the mind*. New York: Harcourt, Brace, 1932. \$3.00.—R. R. Willoughby (Clark).

23. Rubin, E. Harald Höffding: 1843-1931. *Amer. J. Psychol.*, 1932, 44, 583-584.—M. N. Crook (University of California at Los Angeles).

24. Showalter, D. F. A variable-pattern paper maze. *Amer. J. Psychol.*, 1932, 44, 571.—A maze is described in which the path is indicated by a certain sequence of numbers in a large block of numbers. Various patterns can be laid out and mimeographed at small expense.—M. N. Crook (University of California at Los Angeles).

25. Valentine, W. L. A psychology laboratory manual. New York: Prentice-Hall, 1932. Pp. vi + 282. \$2.00.—Contains 49 experiments integrating the laboratory material with itself and with lecture material. The order of experiments follows both Doekerey's *General Psychology* and Valentine's *Readings in Experimental Psychology*. Page references to standard texts appear at the end of each experiment.—J. C. Spence (Clark).

26. Van de Walle, E. A fundamental difference between the natural and social sciences. *J. Phil.*, 1932, 29, 542-550.—Every law of the social sciences is a proposition involving conditions of belief. This is never the case in the natural sciences. The distinction is universal and fundamental. The law of supply and demand, for example, assumes a general knowledge of the facts of supply. The principles of psychoanalysis assume ignorance on the part of the subject of the causes of his complex. Laws of civilization and decay are formulated from civilizations which were ignorant of such laws, and might not hold in a social order which is aware of them. Not only knowledge and ignorance, but also beliefs associated with hope and fear, aspirations, values, and ideals are among the conditions of a law of the social sciences.—E. T. Mitchell (Texas).

27. Vorwahl, H. Ein Vorläufer der Psychoanalyse. (A forerunner of psychoanalysis.) *Zentbl. f. Psychotherap.*, 1932, 5, 308-399.—An appreciation of the psychological insight and clinical knowledge of Balzac.—R. B. MacLeod (Cornell).

28. Wang, S. Psychologische und soziologische Begriffsbildung bei Tönnies. (Psychological and sociological concept formation in Tönnies.) *Jena: Neuenhahn*, 1932. Pp. 37.—R. R. Willoughby (Clark).

29. Yura, T. *Geisteswissenschaft und Willensgesetz. Kritische Untersuchung der Methodenlehre der Geisteswissenschaft in der Badischen, Marburger und Dilthey-Schule*. (Mental science and the law of volition. A critical study of the methodology of mental science in the Baden, Marburg and Dilthey schools.) Berlin: Pan-Verlagsgesellschaft, 1931. Pp. viii + 136. RM. 5.50.—In this essay, which attempts to deal with the subject matter and method of mental science, the author presents his own ideas in connection with a critical consideration of the methodology of mental science in the schools of Baden and Marburg and in the group following Dilthey. Yura's doctrine culminates in the notion that the subject matter of mental science in general is the law of volition and that its method is "skopology." The "law of volition" is the law of the basic function which is considered fundamental to spiritual life in all its phases, theoretical, practical and esthetic. (According to Cohen, it is only through this synthesis of cultural consciousness that the unity of man is attained.) Only if we assume this law is the objectivity of subject-matter and method of mental science guaranteed; then historical phenomena are seen and grasped with transcendental validity in their individual and yet monistic concreteness. "Skopology" (a term proposed as a name for a new method for the mental or historical sciences) arises on the basis of this view. The author admits that he has advocated, almost unconsciously, a philosophical foundation of the Oriental view of history, a view in which is emphasized particularly the primacy of the spiritual as the foundation of all reality.—T. Yura (Tokyo).

[See also abstracts 40, 114, 298.]

SENSATION AND PERCEPTION

30. Adie, W. J. Complete and incomplete forms of the benign disorder characterised by tonic pupils and absent tendon reflexes. *Brit. J. Ophth.*, 1932, 16, 449-461.—The disorder characterized by tonic pupils and absent tendon reflexes manifests itself in several clinical forms; these can be referred to conveniently as complete and incomplete forms. The complete form is characterized by the presence of the tonic convergence reaction in a pupil apparently inactive to light and by absence or diminution of one or more of the tendon reflexes of the lower limbs. The incomplete forms present: (1) tonic pupils alone; (2) atypical phases of the tonic pupil alone; (3) atypical phases of the tonic pupil with absent tendon reflexes; (4) absent tendon reflexes alone. In the atypical phases reactions are absent or difficult to detect. Most of the cases encountered in ophthalmological and neurological practice of ophthalmoplegia interna, ophthalmoplegia interna unilaterale, iridoplegia, and partial iridoplegia for which no cause can be found are probably examples of an incomplete form of this disorder. No known hereditary or acquired morbid factor plays any part in its production. In particular it has no relation to syphilis. It runs a benign course without the addition of

further symptoms and is compatible with long life.—*R. J. Beitel, Jr. (Clark).*

31. Banerjee, M. N. Disparity in binaural acuity. *Indian J. Psychol.*, 1931, 6, 125-141.—The author presents the results of testing auditory acuity in nearly 20,000 college students during the years 1920-31 in Calcutta University. The watch method was used, and all known scientific safeguards to promote accuracy were observed. The conclusions are: (1) that the acuity of the left ear is generally greater than that of the right; (2) that the acuity efficiency of the ears seems to reach its maximum about the age of 11 or 12, and then to decline progressively with advancing age, like the eye, and much earlier than the general bodily development reaches its maximum; and (3) that there are two distinct types of auditory acuity in men, one with a shorter range and one with a larger range, just as in vision we have long sight and short sight, but with the difference that those with long hearing hear also within short ranges.—*L. A. Averill (Worcester State Teachers College).*

32. Birch-Hirschfeld, A. Ein neuer Weg zur Funktionsprüfung des Auges. (A new method of testing vision.) Halle: Niemeyer, 1932. Pp. 11. M. 2.40.—*R. R. Willoughby (Clark).*

33. Dickson, T. E. An introduction to colour. New York: Pitman, 1932. Pp. 68. \$1.25.—*R. R. Willoughby (Clark).*

34. Fernberger, S. W., & Irwin, F. W. Time relations for the different categories of judgment in the absolute method in psychophysics. *Amer. J. Psychol.*, 1932, 44, 505-525.—Reaction times of the three categories of judgment of lifted weights—"light," "intermediate," and "heavy"—in the absolute method in psychophysics were investigated. 4 observers were used, giving a total of 12,950 judgments. Contrary to the results claimed for the relative method by other investigators, reaction times of the three categories in the present case show no significant differences. It was found that reaction times undergo a marked decrease with practice. Reaction times, limens, indices of precision, intervals of uncertainty and points of symmetry are presented in tabular form.—*M. N. Crook (University of California at Los Angeles).*

35. Hamilton, W. F., & Freeman, E. The trichromatic functions of the average eye. *Science*, 1932, 75, 292-294.—Using 18 subjects, the authors find that certain of their observations are inconsistent with classical color theory. The first aim of the investigation was to determine the sensitivity of the average eye to each of the three primaries. "On the basis of data from only four subjects König has declared the population to be divisible into two separate sensitivity groups which would form a bimodal distribution curve. With our 68 subjects we find no such bimodal segregation, but simply a normal distribution with a distinct massing about the median." Second, the investigation aimed "to determine where the loss of saturation of mixtures begins, why it occurs, and particularly to establish the precise con-

ditions under which it occurs." The loss of chroma found by the authors was for only a very restricted region of the spectrum. The difference in results is said to be due to the use by other investigators of dark adaptation, which "admitted scotopic factors which cause a desaturation of the field containing the shortest wave lengths." This desaturation may also be a result of the use of a poor chroma. The authors believe that the extension of the blue curve into the long-wave region of the spectrum to account for the desaturation of the yellow region is "merely a postulate which has derived its force from tradition, and that under critical examination it becomes unwarranted."—*N. Goldman (Boston Psychopathic Hospital).*

36. Klemm, O. Wahrnehmungsanalyse. (Analysis of perceptions.) *Abderhaldens Handb. d. biol. Arbeitsmethoden*, 1925, Abt. VI, B I, 1-106.—This review of psychological methods for the study of sensations is divided into four parts. The first part (13 pages) deals briefly with modern problems of perception and a classification of methods, the second (33 pages) describes methods of analyzing quantitative differences in perception, the third (34 pages) describes methods of qualitative analysis, such as changes in perception, individual differences, dependence upon specific conditions, etc., and the last part gives methods for the study of visual perceptions in their temporal relationships. The author not only gives a technical description of the methods, but discusses occasionally their assumptions and the question whether the methods are adequate to solve the psychological problems for the study of which they are designed. He thinks that Gestalt psychology has advanced the study of perceptions and has changed our evaluation of the technique and experimental results in this field. The subject matter of perception analysis is all that happens in ourselves when we perceive. The part of our perceptions which refers to the formal external conditions is called the perception of the shape (*Gestaltwahrnehmung*); the part which contains our inner psychological processes which were aroused or changed by the perceptions is called sensation.—*Z. Piotrowski (Columbia).*

37. Lorenzini, G. Experimentelle Untersuchungen über das Substrat der Bewegungs-Empfindungen. (Experimental research upon the subject of sensations of movement.) *Arch. f. d. ges. Psychol.*, 1932, 84, 193-282.—The author begins the article with a summary of the work of Goldscheider, Frey and Meyer, Lehmann, and Öhrwall. The experimental procedures and equipment are described. The results of the introspective parts of the study are similar to those found by Störing but different from those of Goldscheider, in that this experiment gave an increase of the threshold using electrical stimulation. The results of electrical stimulation of the muscle and ligament are very similar. The author believes that the differences between her results and those of Goldscheider are due to the fact that Goldscheider used himself as subject, whereas this experiment used

several subjects. She concludes that sensations of movement come about through a perception of successive, spatially continuous changes of complex muscle, skin, ligament and deep pressure sensations. Her results tend to agree with those of Öhrwall in that there is no special sense organ, but she stresses the fact that sensations of movement are not merely a complexity of simpler sensations; there is a central element involved. A bibliography of 51 titles is appended.—*F. J. Gaudet* (Dana).

38. Maiti, H. P., & Samanta, M. Effect of the surrounding surface on the temporal phase of the negative after-image. *Indian J. Psychol.*, 1931, 6, 151-156.—The authors find that the after-image of the surrounding surface not only appears first but disappears after the after-image of the central stimulus. The total duration of the former after-image is much greater than that of the latter. The central surface and the ground surface together constitute a sort of ground and figure relation or a Gestalt.—*L. A. Averill* (Worcester State Teachers College).

39. Nageotte, Z. Sur des troubles visuels insolites et de nature différente observés successivement chez le même sujet. (Concerning unusual visual anomalies of different kinds observed successively in the same subject.) *J. de psychol.*, 1932, 29, 466-468.—Two anomalies, one associated with foveal scotoma and the other with achromatopsia for blue, are described.—*N. L. Munn* (Pittsburgh).

40. Newhall, S. M. The control of eyelid movements in visual experiments. *Amer. J. Psychol.*, 1932, 44, 555-570.—The error due to winking in visual experiments may in some cases be 5% or larger. Procedural and instrumental controls for the eyelid are discussed at some length. The ocular speculum, an adjustable device for restraining the lid mechanically, is described in detail. The speculum can be used to prevent winking for as long as ten minutes. Data on conditions favorable and unfavorable to winking, and a frequency table of winking by various subjects, are presented.—*M. N. Crook* (University of California at Los Angeles).

41. Peckham, R. M. Report of a case of total color blindness. *Amer. J. Optom.*, 1932, 9, 1-7.—A case is reported of a woman suffering from congenital total color blindness with photophobia. All colors were seen as gray. Spectral hues were matched against a series of grays to determine their intensity, with the light adapted eye. The luminosity curve obtained was similar to the normal photopic curve for intensity.—*H. Barry, Jr.* (Tufts).

42. Peckham, R. M. Optometry's educational problem. *Amer. J. Optom.*, 1932, 9, 294-304.—The author states that optometry should logically come under the department of psychology rather than under the department of physics; except that psychology departments "in most universities are relatively new and hardly organized to take on more trouble."—*H. Barry, Jr.* (Tufts).

43. Schlossberg, T. Simultaneous internal and external stimulation of the iris by adrenin. *Amer.*

J. Physiol., 1932, 102, 71-74.—"The reactions of the iris, denervated by removal of the superior cervical sympathetic ganglia, to adrenalin instilled in the conjunctival sac and to emotional excitement were studied. Instillation of adrenalin in the conjunctival sac begins to produce marked dilatation of the corresponding pupil only about 15 days after denervation. As time passes this dilatation occurs earlier, is more marked and lasts longer. Emotional excitement produces stronger and longer pupillary widening of the previously instilled eye. On repetition of emotional excitement the effects increase. These reactions occur even several hours (3 to 8) after instillation, when both pupils are apparently in identical conditions. Inactivation of the adrenals greatly diminishes but does not wholly suppress the above-mentioned results."—*C. Landis* (N. Y. Psychiatric Institute).

44. Schumann, F., & Nahm, E. Neue Untersuchungen über die Vergleichung räumlicher Grössen. III. Über den Vergleich von Komplexen geometrischer Gebilde und tonfreier Farben. (New investigations of the comparison of spatial sizes. III. On the comparison of complexes of geometrical figures and of achromatic colors.) *Zsch. f. Psychol.*, 1932, 126, 146-192.—This is an intensive study of the processes involved in simultaneous and successive comparison. Complexes of simple geometrical figures, e.g., circles, triangles, squares, etc., or of spots of gray, were arranged on cards and presented tachistoscopically. In each case a particular complex, the standard, containing 2, 3, 4, or 5 figures, was presented for 1 sec., followed 2 secs. later by the same complex with some or all of its elements slightly changed as to size. Observers were instructed to describe in detail the change that had taken place and their experience of comparison. Six trained observers were used. These fell into two groups. Some always apprehended each complex as a unitary, simultaneous whole, but could not make an immediate comparison of any one element of one complex with the corresponding element of the other. In such cases judgments about specific elements were always judgments of inference. Others attended successively to specific elements of the first complex, and were able to compare these immediately with the corresponding elements of the second complex. In these cases judgments were fewer but more accurate. When the number of elements exceeded three, comparison ceased to be successive and became simultaneous. The experiments indicated the existence of a pronounced simultaneous size contrast, to be referred apparently to the "absolute impression" of size. No evidence was found to support the assumption that a circle which appears large beside a small square is seen as larger than when it is presented in isolation. Analogous results were obtained from the experiments with gray spots.—*R. B. MacLeod* (Cornell).

45. Selz, O. Die psychologische Strukturanalyse des Ortskontinuums und die Grundlagen der Geometrie. (The psychological structural analysis of spatial continuity and the foundations of geometry.) *Zsch. f. Psychol.*, 1930, 114, 351-362.—Space is a

sensory continuity comparable to other sensory continuities, such as the continuity formed by the colors taken as a whole. Directions may be defined for these continuities, that is, progressive variations in degree of a determined quality. For example, we can discuss a series of tints of a given hue which may become increasingly more saturated or lighter in shade, or a series of points which may become higher and higher or farther and farther to the right, etc. Selz develops these comparisons, limiting them at the same time. Such conceptions furnish him with a basis for establishing the postulates of geometry, which becomes for him a particular form of the theory of ordered continuities.—A. B. Hunter (Clark).

46. [Various.] Report of the transactions of the American Academy of Optometry. *Amer. J. Optom.*, 1932. Pp. 114.—Several papers on matters pertaining to optometry are presented among them: *The Physio-Psychological Approach to Squint*, by George D. Oertel; *Pain Interpretation in Optometric Practice*, by C. H. Johnson; *The Role of Reciprocal Innervation in Extra-Ocular Muscle Balance*, by E. F. Tate; and a brief *Preliminary Report of the Research Fellow of the American Academy of Optometry on the Problem of Strabismus*, by William S. Feinbloom.—N. Goldman (Boston Psychopathic Hospital).

47. Weymann, M. F. The visual acuity of automobile drivers. *Amer. J. Ophth.*, 1930, 13, 441-442.—The writer advocates the certification of vision as requisite to the securing of a driver's license.—C. W. Darrow (Behavior Research Fund, Chicago).

48. Whitnall, S. E. The anatomy of the human orbit and accessory organs of vision. New York: Oxford, 1932. Pp. 479. \$6.25.—R. R. Willoughby (Clark).

49. Wilcox, W. W. Helson and Fehrer on "the rôle of form in perception." *Amer. J. Psychol.*, 1932, 44, 578-580.—Helson and Fehrer had shown experimentally that light at the threshold of vision is formless. Wilcox shows experimentally, on the contrary, that threshold stimuli have a definite perceptual form, but that form is round regardless of the objective shapes of the stimuli.—M. N. Crook (University of California at Los Angeles).

50. Wolff, J. Field testing. *Amer. J. Optom.*, 1932, 9, 195-218.—A review of peripheral color vision as an aid to diagnosis. It is stated that in neurasthenia there is a marked contraction of the color fields due to fatigue which occurs during the progress of the examination. In hysteria the customary relation of fields is sometimes reversed (dyschromotopia); in other cases the tubular form is found as described by Janet.—H. Barry, Jr. (Tufts).

[See also abstracts 10, 85, 121, 190, 217, 282, 301, 338.]

FEELING AND EMOTION

51. Dunlap, K. Are emotions teleological constructs? *Amer. J. Psychol.*, 1932, 44, 572-576.—It is suggested that "emotions" as usually conceived have proved to be a sterile hypothesis, and the con-

cept is going the way of the concept of "instincts." Emotional processes do vary over quite a wide range, but the elements, if any, remain to be determined.—M. N. Crook (University of California at Los Angeles).

52. Hollingshead, L., & Barton, J. W. The adrenal cortex and emotion: a reply. *Psychol. Rev.*, 1932, 39, 492-497.—An answer to the five objections raised by King against an earlier article of the authors on the function of the adrenal cortex in emotion, which appeared in this journal, 1931, 38, 538.—A. G. Bills (Chicago).

53. Hoppe, F. Untersuchungen zur Handlungs- und Affektpsychologie. IX. Erfolg und Misserfolg. (Studies on the psychology of action and emotion. IX. Success and failure.) *Psychol. Forsch.*, 1930, 14, 1-63.—A satisfied need produces a purely negative state of relaxation. In satiety, on the contrary, there is a definite state in regard to the future which consists in a positive tendency not to perform the same act again. But how can the tendency to repeat an act which has just been completed be explained? The explanation may lie in the pleasure which arises from success, which is now associated with the act. However, in reality the conditions are less simple, for the resumption of a task is not a simple case of repetition. A new end is in view, that is, the subject has changed the level of his expectations. Hoppe studies the variations of this level, using a group of games which involved patience and ingenuity. The subject was apparently left alone while he was solving the problems, but the experimenter was observing him under cover. The subject's first trials, according to the results obtained, fixed the level for his ambitions. In general, success raised this level, and failure lowered it. In the first instance, for example, the subject began to work more quickly in order to assure himself that he was really master of the problem, while in the second case, he set himself an easier problem in order to assure himself of success. There is not merely a single end to be considered, but a whole hierarchy of ends, and the momentary action can be understood only in its relation to the personality of the subject. Success heightens his self-esteem, while in case of failure the individual endeavors to elude responsibility, to berate the difficulty of the problem in general (and not simply the difficulty of the problem as it concerns himself), and to deceive the experimenter and witnesses as far as possible. Thus, the subject tries to keep the level of his self-esteem as high as possible. The author found a conflict between the desire of the subject to raise his momentary rating and the fear of being compromised by failure. The impression of failure can be experienced only within the limits where it is also possible to experience success.—A. B. Hunter (Clark).

54. Horst, P. A method for determining the absolute affective value of a series of stimulus situations. *J. Educ. Psychol.*, 1932, 23, 418-440.—On the assumption that there is a continuous gradation of the feelings evoked by stimulus situations, a technique is developed, on the basis of Thurstone's

method of psychophysical analysis, for scaling situations with reference to their affective value. The equations needed in solving for the absolute affective value of a series of stimulus situations are derived. The average difference and least square methods of determining scale values are compared and the necessary statistical procedure outlined. A model experiment to demonstrate the scaling method is described and the results presented.—J. A. McGeech (Missouri).

55. Landis, C., & Hunt, W. A. Adrenalin and emotion. *Psychol. Rev.*, 1932, 39, 467-485.—The current doctrine that injections of adrenalin are incapable of producing a genuine emotion was experimentally tested on psychopathic subjects. To avoid confusion, the term emotion is further differentiated into "emotion-subjective," "emotion-objective," and "emotion-social." Intramuscular injections in the upper arm of 0.5, 1.0, and 1.5 cc. of 1-1000 solution of adrenalin chloride were alternated on successive days with control injections of salt solution. 27 subjects were used in all. They were distributed among the psychoses as follows: 6 manic-depressive (4 manic, 2 depressed); 12 dementia praecox (5 simple, 4 catatonic, 3 paranoid); two general paresies; five psychopathic personalities; one involutional melancholia; and one toxic psychosis. The results show no effect from the control dose, but a few cases of genuine "emotion-objective" from the adrenalin dose. The results are similar to those of Cantil and Hunt on normal subjects. No increase in the effect of the adrenalin occurred as a result of previous injections of thyroxin. No correlation was found between the amount of reaction to the adrenalin and the degree of emotional instability of the subject or the type of mental disorder. The authors conclude that the results do not unequivocally either favor or refute the James-Lange theory. The writers suggest that the emotional experience is a highly variable state in which higher intellectual processes play an important part. Hence while in some persons the mere eliciting of the organic state is sufficient, in other more critical individuals it is necessary for additional factors to be present. The adrenalin technique furnishes a suggestive approach to emotion, but has limitations.—A. G. Bills (Chicago).

56. Maier, B. Ueber des Gemüt. (On emotional disposition.) *Zentbl. f. Psychotherap.*, 1932, 5, 333-343.—The emotional disposition of an individual, his Gemüt, determines to a great degree his attitude toward the external world, and especially whether he devotes himself to the world or isolates himself from it. The writer discusses the relationship of Gemüt to criminality and various psychoses and reports several cases which he has observed. Tests devised for use in this field seem to be inadequate. Bibliography of 23 references.—C. W. Fox (Rochester).

57. Moers, M. Schadenfreude. (Malicious joy.) *Zsch. f. päd. Psychol.*, 1930, 31, 127-134.—The author analyzes the different forms of malicious joy which we experience at the sight of another's misfortune. She makes the following classification ac-

cording to the motives causing satisfaction: pseudo-malicious joy, caused by misfortune to another from which we gain benefit, the joy arising from the personal benefit and not from the other's misfortune; joy in the comic, arising from the sight of another in a ridiculous situation; joy in another's misfortune because the situation offers us consolation for our own personal failures in the past and affords us satisfaction regarding our present feeling of security; joy involving a feeling of justice, in that we experience a kind of democratic satisfaction from the downfall of those who have been unusually successful; joy in seeing the haughty humbled; and, finally, joy caused by another's misfortune because we have disliked or hitherto envied him or because we are of such a nature that we experience pleasure only as a result of personal good fortune. Cruelty is morally the most harmful form of malicious joy.—A. B. Hunter (Clark).

58. Mouchet, E. El mecanismo de la emoción. (The mechanism of emotion.) *Prensa med. argentina*, Feb. 20, 1930. Pp. 56.—The author reviews the theories of emotion and the various arguments and data used to support them. He then gives his own conception of the problem, according to which the visceral phenomena do not constitute the emotion itself, but represent a later mode of expression of it, reinforcing and completing it and giving it its subjective character through the cenesthetic contribution which they condition. Having observed a case very similar to the one on which Revault d'Allonnes bases his estimation of unemotional propensities through loss of visceral sensitivity, Mouchet found that his patient, who complained of not experiencing feelings or emotion, exhibited unquestionable affective reactions. He explains the two cases as being due to a disturbed feeling arising from the fact that, because of a lack of visceral cenesthesia, the affective phenomena had lost their habitual aspect and were not recognized. Accordingly their existence was denied.—A. B. Hunter (Clark).

[See also abstracts 92, 153.]

ATTENTION, MEMORY AND THOUGHT

59. Birenbaum, G. Untersuchungen zur Handlungs- und Affektpsychologie. VIII. Das Vergessen einer Vornahme. (Studies on the psychology of action and emotion. VIII. The forgetting of instructions.) *Psychol. Forsch.*, 1930, 13, 219-288.—We are liable to forget instructions which are separated from the resulting action for a certain length of time and which are relatively disconnected from the required activity. In this experiment the instructions were concerned with actions to be repeated several times. The subject had to solve a series of simple problems and write the solutions on slips of paper which he was told to sign for classification purposes. The author studied the cases in which the signatures were omitted. It was found that, when the successive tasks were homogeneous, to the extent that this uniformity was observed by the subject, he would tend

to form a system of the tasks in which the instructions dealing with the signature were included. There were few omissions in this case. The omissions were caused when a break was introduced into the work, such as a short conversation with the experimenter. Then, when the task was continued again, the problems were once more regarded as isolated tasks. If the subject began with homogeneous tasks and then was given different ones, numerous omissions of the signature were observed. The deciding factor, however, was not the special nature of the problems, for there were few omissions in a series composed entirely of heterogeneous material, but it seemed to be the abrupt passage from monotonous tasks to varied ones. Reaction to this break, however, was a function of the subject's temperament. Disturbances of an affective character caused one of the two following reactions: they might give the particular task concerned an individual affective character, thereby isolating it from the problem as a whole; or they might produce a shock which would disrupt the system, and, as a result, the omissions would be noticed, not in the problem concerned, but in the following problems.—A. B. Hunter (Clark).

60. Boreas, Th. [Experimental studies on memory. II. The rate of forgetting.] [*Praktika de l'Académie d'Athènes*], 1930, 5, 382 ff.—(In Greek, with an English summary.) The author repeated Ebbinghaus's experiments on the rate of forgetting as a time function. He found very irregular variations in the initial phases (which Piéron says are due to the method used) and then a regular improvement conforming to the Ebbinghaus type. This was found for memorizing both nonsense material and verses, the latter being retained to a higher degree for the same amount of time. After a ten-month period, the author found in one special case no trace at all of the nonsense material.—A. B. Hunter (Clark).

61. Bowers, H. Visual imagery and "observation." *J. Educ. Psychol.*, 1932, 23, 441-445.—"The constituent elements of a picture exhibit that relative constancy of imaginal content found to exist for other visual, auditory, and kinesthetic stimuli. A small but significant correlation exists between mean ratings of images aroused by items in a picture and frequency of mention of these items in 'reports' of the picture. A rather more pronounced association exists between clarity of image and mean rank of item." No causal relation seems to be involved. A test involving the completion of geometrical and nonsense figures supports the major conclusions from the use of pictures. The subjects were first and second year high school pupils.—J. A. McGeoch (Missouri).

62. Bulbrook, M. E. An experimental study into the existence and nature of "insight." *Amer. J. Psychol.*, 1932, 44, 409-453.—This investigation was inspired by the variety of meanings which have characterized the term "insight" in the recent literature. To individual and group observers were presented 13 different problems, the solutions of which involved such diverse functions as apprehension of number patterns, manipulation of mechanical objects, feeling

for metrical forms, etc. Comments and reports of the observers were recorded in detail. Examination of the reports shows that, particularly in some of the problems, verbal comments play a large part in progress toward a solution. In summary, it is pointed out that in problem solving, instances as widely varied as the following types are found, to which the term "insight" in one or another of its present usages might be applied: "(1) perceptive apprehension extended on the side of use and means, (2) perceptive apprehension accompanied by imaginative revaluation, (3) anticipative imagination, (4) comprehension of a solving generalization, (5) sudden drop in learning-time, (6) reapprehension of experimental material under occasional instruction, (7) comprehension of a general principle and its applicability in a specific instance, (8) apprehension of a total pattern-arrangement or of particular relevant features in the pattern, and (9) comprehension of a constructive scheme, of the rules or canons of an art, or of the natural relation between presented objects."—M. N. Crook (University of California at Los Angeles).

63. Crafts, L. W. Whole and part methods with visual spatial material. *Amer. J. Psychol.*, 1932, 44, 526-534.—The objects of this experiment were "(1) to determine the efficiency of whole and part methods for learning certain samples of visual spatial material, and (2) to secure further data regarding the influence of the material to be learned." 305 undergraduates were used as subjects. "Three types of visual material—irregular arrangements of circles and of unrelated lines and irregular geometric figures—were employed. The total exposure times were brief; . . . reproduction was immediate. . . . The data show the whole method to have been reliably superior with the circles and the figures only; with the much more difficult unrelated lines . . . no method was reliably superior to any other."—M. N. Crook (University of California at Los Angeles).

64. Hartmann, G. W. Insight and the context of Gestalt theory. *Amer. J. Psychol.*, 1932, 44, 576-578.—A reply to Ogden's criticism of an earlier article by Hartmann, in which the concept of insight was examined from an eclectic point of view.—M. N. Crook (University of California at Los Angeles).

65. Heiss, A. Zum Problem der isolierenden Abstraktion. Genetisch vergleichende Studien. (The problem of abstraction as a question of isolation.) A study of comparative genetics. *Neue psychol. Stud.*, 1930, 4, 289-318.—It is more difficult to isolate a member of an organized whole than an element of an unorganized mass. The author performed an experiment verifying this law in the case of children. The subject was shown for a short period of time two ensembles formed of variously sized pieces taken from a child's construction game. The group on the right always consisted of a more or less complicated design, one of the pieces of which was missing. This piece was indicated by chalk marks or by grooves. The subject had quickly to find the missing piece in the ensemble on the left, which might be either a com-

plete design in itself or a group of unorganized pieces. It was found that the children always took a longer time to find the piece in the former than in the latter case. The length of time was inversely proportional to the age of the child, for the younger the child the stronger was the action of the design in dissimulating the identity of its elements by virtue of their function as a whole. The problem was varied by using colored sections. The influence of form was found to be very great for all ages.—A. B. Hunter (Clark).

66. Henning, H. F. An investigation of retention using the methods of recall and recognition. *Australasian J. Psychol.*, 1930, 8, 305-310.—The author first made a comparison of the curves of forgetting obtained by these two methods, the same material being used in both cases, viz., nonsense syllables and series of figures. Various intervals were used with a large number of subjects. The results obtained for recall were superior to those for recognition when long intervals were involved, but the reverse was true for intervals less than 48 hours. Second, he investigated the relations between memory and intelligence (determined by the Army Alpha test), general skill, and success in scholastic examinations. He found no correlation with general intelligence, but memory appeared to be an important success factor in scholastic examinations (.48 and .42).—A. B. Hunter (Clark).

67. Jaensch, E. R. Auseinandersetzungen in Sachen der Eidetik und Typenlehre. VIII. Weiteres zur Auseinandersetzung der Integrationstypologie mit der Typenlehre Kretschmers. (Discussion of problems in eidetics and typology. VIII. A further discussion of the bearing of the integration typology upon the typology of Kretschmer.) *Zsch. f. Psychol.*, 1932, 126, 51-85.—Kretschmer's work is seen as a valuable contribution to the etiology of the psychoses, but not as a valid normal typology, since within the "schizoid" type the two essentially opposed normal types, S and J, recognized by Jaensch, are usually to be found. The apparent conflict between the findings of Kretschmer on the one hand and of Kroh and Pfahler on the other with reference to the characteristics of the "schizoid" type is to be explained on the assumption that the "schizoids" of the former were predominantly S-types and those of the latter predominantly J-types. Similarly Kretschmer's typology gives no true picture of typical differences in temperament. With reference to the recent application at Tübingen of Kretschmer's typology to problems of education, it is held that since Kretschmer's point of view is essentially psychiatric and etiological it can give no adequate picture of the fundamental value tendencies, and hence can be of little service. In this connection, and in connection with the problem of cultural conflict, it is held that the distinction between the fundamental S and J types is of primary importance. The present cultural crisis in Germany, for instance, is to be understood as a result of the conflict between mental struc-

ture of type J and culture of type S.—R. B. MacLeod (Cornell).

68. Jaensch, E. R. Ueber den Aufbau der Wahrnehmungswelt und die Grundlagen der menschlichen Erkenntnis. II. Aufgabe, Weg und Ziel der Untersuchung. (On the organization of the world of perception and the foundations of human knowledge. Problem, method, and aim of the research.) Jaensch, E. R., & Schweicher, J. Experimentelle Untersuchungen über die Begriffsbildung im anschaulichen Denken. (Experimental studies on the foundation of concepts in concrete thinking.) Schmitz, K. Ueber das anschauliche Denken und die Frage einer Korrelation zwischen eidetischen Anlage und Intelligenz. (On concrete thinking and the question of correlation between eidetic disposition and intelligence.) Weber, H. Experimentelle strukturalpsychologische Untersuchungen über das Denken und die Denktypen. (Experimental studies in structural psychology on thinking and the intelligence types.) *Zsch. f. Psychol.*, 1930, 114, 167-184; 185-240; 289-350; 116, 1-106.—These articles are the publications of works of Jaensch's students on the foundations of human knowledge. In his introduction, Jaensch points out in what ways these studies are connected with his first series of studies on the world of perception. He proposes to study living thinking in its varieties of individual types, contrary to the usual logical method and the theory of knowledge. His method is a continuation of that which he used in the problem of perception, whereby he was able to reconcile the empiristic and the rationalistic theses. The first application of this method is found in his study of the formation of concepts in eidetic subjects. A series of pictures of objects was shown which had a common main idea, although they differed in secondary details, such as a cervical vertebra and a lumbar one, two different leaves or two trees of different varieties, two houses or a house and a church, etc. The subject was asked to project on a screen an eidetic image of the objects shown. It was found that this image partook of the characteristics of both models. It was not, however, as is described in the classical theory, a sort of mechanical resultant in which the common characteristics were reinforced by superposition while the differences were neutralized. The resemblance was emphasized by means of metamorphoses which were up to a certain point creations or interpretations. Schmitz studied the intelligence ratings of students showing pronounced eidetic characteristics. Decided eidetic abilities were to be found at all the intelligence levels, but the distribution depended upon the particular form of these aptitudes. In the integrated forms of type B, these aptitudes were correlated with superior intelligence, while for the disintegrated individuals of type T these aptitudes were an index of inferior intelligence. The main interest of this study comes from the masses of details which the author gives. Weber also gives detailed reports of his results. His aim was to study thinking from the characterological point of view, that is, from the

outside, the judgment being concerned with the products involved. He discusses the problem from the psychophysical point of view in its relation to constitutional personality, for he considers that the characteristics of the psychophysical personality are continued into the higher levels of thinking. In his observations, the individual type is the invariant and the experimental procedure is the variant. The Jaensch system, on which this study is based, deals with three principal types: the integrated, the disintegrated, and the synesthetic. This last type is related to the integrated, of which it is a particular form. Weber devotes himself to a study of this one type, four varieties being described: the synesthetic type involving feelings and impressions, the diagrammatic type, the motor type, and the schizofornas. He finds that concepts are represented by feelings and that phenomena are the objectifications or the emanations of the self.—A. B. Hunter (Clark).

69. Köhler, W. *Concepto de asociación.* (Concept of association.) *Arch. de la Soc. de biol. de Montevideo*, 1930, Suppl., 19-24.—In a paper before the Congress of Biology of Latin America, Köhler reminds his audience that the classic conception of association does not take into account the fundamental biological fact of organization. There is an organization of the mental life which corresponds to neurological organization, implying unified functions outside of any association. Just as atoms enter into the structure of the molecule, so we find that psychological materials enter into new organizations and are changed completely as shown in the study of learning progress. Dealing with the law of memory, he affirms that the repetition of a part leads to the repetition of the whole and that this law should be substituted for that of the law of association, the latter being only the secondary effect of the process of natural organization, which is a dynamic concept common to psychology and neurophysiology.—A. B. Hunter (Clark).

70. Lindworsky, J. *Methoden der Denkforschung.* (Methods of research on thought processes.) *Abderhaldens Handb. d. biol. Arbeitsmethoden*, 1925, Abt. VI, B 1, 157-184.—This article describes methods of laboratory control of thought processes. The methods are classified according to their usefulness in solving the following theoretical problems: the relationship between imagery and thought, the visual images in thinking processes, the memory of thoughts, the process of generalization (discovery of relations), the nature of concept and judgment, deductive thinking, and creative thinking. The review is short and does not discuss the methodological merit of the methods or results obtained with them.—Z. Piotrowski (Columbia).

71. Lopes, M. B. L. *Pesquisas sobre a memoria de fixação.* (Investigations on memory retention.) *Arch. brasileiros de hygiene mental*, 1930, 3, 235-240; 277-290.—The author, as a result of a course given by the Fessards in 1926 in Rio de Janeiro, gave Claparède's 15-word test to 400 Brazilian school children, using auditory and visual presentations and

a test composed of 15 pictures. No appreciable sex differences were found. Calculations were made based on age differences, but Galton's ogives showed that the tests measured ability and not development, for the individual differences outweighed the age variations. For 88 subjects, the calculated correlations gave Pearson r 's as follows: .37 for auditory and visual presentation modes; .30 for visual memory for words and for figures; and .67 for auditory memory for words and visual memory for figures. The following are the medians for the various ages for the three kinds of tests:

Age	8	9	10	11	12	13	14	15
Auditory memory for words	4	5	5	5	6	6	7	8
Visual memory for words	5	5	6	6	6	7	8	8
Visual memory for figures	5	7	8	8	8	9	9	9

These figures are somewhat lower than those obtained in Geneva.—A. B. Hunter (Clark).

72. Luh, C. W., & others. *Word association in Chinese children.* *Yenching Stud. Psychol.* (Yenching Univ., China), 1932, No. 1. Pp. 60 (Chinese section, detailed); pp. 7 (English section, brief).—A free association test composed of 100 stimulus words, of which 63 are exact translations from the Woodrow list, was given to 508 children in 12 different schools located in 7 cities, China, who ranged from 8 to 11 years in age. The tests were given individually with simultaneous visual and oral presentation. Two groups of college students of 100 each, mostly freshmen, were also tested, records being taken in groups of about 25. Association tables were compiled as usual, but contain only those answers whose frequency is not less than 1% of the total number of people tested. No significant sex and age differences were found. However, the author points out that (1) the concentration of the highest frequency responses is much larger among the children than among the adults and the foreign groups (Kent and Rosanoff's data with Woodrow's, or Kubo's data for Japanese "middle school" boys and unspecified girls). The Chinese children returned the largest number of "opposite" and "coordinate" responses, especially in the categorical negative. It seems that with the Chinese children the word association test works more or less like a linguistic game. Instead of word association, some such word as word-completion or phrase-completion would be more appropriate. (2) In China as well as in America or Japan, the children always have a larger average concentration of the highest frequencies than that of the adults. (3) The Chinese children are most dissimilar to the American children in association tendencies. The children in each case are more like the adults. Finally, the author suggests that the use of word association tests, for adults as well as for children, has to be re-evaluated in a new light. 15 tables and a bibliography of 8 articles.—C.-F. Wu (Nat. Res. Instit. Psychol., China).

73. Maiti, H. P. *Memory and intelligence.* *Indian J. Psychol.*, 1931, 6, 169-181.—While it is commonly believed that memory and intelligence are

closely correlated, there have been few studies of correlation between memory and measured intelligence. The present study finds that the more intelligent group of subjects is superior to the duller group in memorizing ability and in the first reproduction score. It finds also a high correlation between ability to memorize nonsense syllables and both estimated and measured intelligence. The author presents theoretical speculations regarding the psychological basis of this correlation, and concludes that memory capacity involves mental organization, and that it is this organization aspect of memory that constitutes the basis of its high correlation with intelligence. Students in the psychological department of the University of Calcutta were the subjects for the experiment.—*L. A. Averill* (Worcester State Teachers College).

74. *Péres, E. Représentations libres et association des idées.* (Free representations and association of ideas.) *J. de psychol.*, 1932, 29, 469-472.—*N. L. Munn* (Pittsburgh).

75. *Rose, G. Welche psychische Kräfte beeinflussen den Vorstellungsverlauf bei der mathematischen Arbeit?* (What are the psychological forces which influence the course of ideas in mathematical work?) *Zsch. f. päd. Psychol.*, 1930, 31, 505-514.—Influenced by the studies of G. E. Müller and Selz, Rose finds in mathematical work the following factors: the play of associative tendencies, which bring about reproduction by association through contiguity; the intervention of perseverance (of little importance); and the preponderant rôle of determinative tendencies which keep before the mind the end to be attained.—*A. B. Hunter* (Clark).

76. *Sándor, B. The functioning of memory and the methods of mathematical prodigies.* *Character & Personality*, 1932, 1, 70-74.—The ability of Finkelstein, the Polish calculating expert, is compared with that of other mathematical prodigies. He is superior to Diamandi and Inaudi, but inferior to Rükle, in learning time as related to the number of digits. Finkelstein has no special ability for mathematics and did not discover his interest in calculation until his twenty-second year. His general ability is not at all high. Some of the requisites for such performances are power of concentration, rapid orientation among figures, interest in and a sentiment for mathematical combinations, knowledge of number theory, sensing of abstract relations discovered empirically, a ready-made stock of partial sums, and auxiliary images. The most important factor is a good memory in difficult problems. There is no need for a special gift for mathematics. Working of the general intelligence suffers as a result of this one-sided preoccupation.—*M. O. Wilson* (Oklahoma).

77. *Schlote, W. Ueber die Bevorzugung unvollendeter Handlungen.* (On the preferential character of incompleted acts.) *Zsch. f. Psychol.*, 1930, 117, 1-72.—Schlote first repeated Zeigarnik's experiments in which he gave his subjects a series of simple, practical problems. The subjects were sometimes

permitted to complete their tasks undisturbed, and sometimes they were interrupted, the task being left unfinished. Later they were asked to recall these problems. Memory for the incompleted problems was found to be better than for the completed ones. Schlote's results corresponded largely with those of Zeigarnik, but he believes that the decisive factor was the subject's interest in the task. He objects to Zeigarnik's tests because of their inequality. Therefore he undertook to repeat the experiment with more homogeneous material. He used tests requiring the substitution of a letter in nonsense syllables. The apparatus presented simultaneously the syllable and an indication of the task to be accomplished. Sometimes the task had to be carried out and sometimes left in a state of determined intention. Later the experiment was repeated with the same syllables, but the nature of the activity was left free and unimposed. A predominance of the purely intentional attitudes was found, and from this finding the author concludes that there is a greater persistence in memory of attitudes involving incompleted acts. He believes that the preferential character of incompleted acts may be explained by the determining tendency concept (Ach).—*A. B. Hunter* (Clark).

78. *Shendarkar, D. D. The nature of proof.* *Indian J. Psychol.*, 1931, 6, 147-149.—Besides observations, there is little experimental work on the subjective nature of proof. The author gave arithmetic problems to twelve students of psychology, and from their introspections arrived at several conclusions regarding the nature of proof. The various grounds for the acceptance of a certain line of reasoning were classified under six headings: accepting a formula or rule because it worked; accepting a new procedure from analogy; accepting a formula because it is familiar; interpreting a new method in terms of one already known; accepting the algebraic method as universal; and accepting a procedure after understanding the reasoning of its derivation. It is concluded that the acceptance of a certain line of reasoning is not always inherent in the logical sequence of the various steps constituting the argument.—*L. A. Averill* (Worcester State Teachers College).

79. *Storch, A. Ueber Orientierungsfähigkeit auf niederen Organisationsstufen.* (The ability of orientation at lower levels of organization.) *Zsch. f. angew. Psychol.*, 1932, 42, 68-101.—The aim of this study was to investigate the spatial orientation capacity of normal, psychopathic, insane, and mentally deficient persons. The method consisted of showing the subject a pathway through a complicated maze, with instructions to duplicate the tracing. The most surprising result was that one of the imbecile subjects did very much better than any of the normal ones. The insane subjects (schizophrenia, manic-depressive, epileptic) did on the whole very poorly. The psychopaths approached the performance of the normal subjects. The types of errors of the various classes of subjects are analyzed and compared with each other.—*K. F. Muensinger* (Colorado).

80. Wyatt, H. G. Free word association and sex-difference. *Amer. J. Psychol.*, 1932, 44, 454-472.—Two lists of stimulus words were used in connection with different groups of subjects, from the 7th grade to adult, numbering about 1000 subjects in all. Stimulus words and responses were classified into groups, and a complete analysis of the differential responses of the sexes was carried out. It is concluded that a wide range of stimulus words with an analysis confined to the most sex-contrasting responses is more informative and practicable than a narrower range of words with a fuller analysis. Data on sex differences are reported in tabular form.—M. N. Crook (University of California at Los Angeles).

[See also abstracts 91, 92, 97, 104, 321, 328.]

NERVOUS SYSTEM

81. Berger, H. Das Elektroencephalogramm des Menschen und seine Bedeutung für die Psychophysiologie. (The human electroencephalogram and its significance for psychophysiology.) *Zsch. f. Psychol.*, 1932, 126, 1-13.—The electroencephalogram (E.E.G.), obtained for the first time in 1924 by the writer, is the oscillatory curve representing the permanent electrical processes of the cerebrum, measured galvanometrically and recorded graphically. Details of procedure are given in other articles. Evidence indicates that at least one component of the E.E.G., the so-called alpha wave, always accompanies the cortical processes which are most closely connected with conscious activity. When consciousness has been heightened or reduced, e.g., as a result of drug action, the alpha waves show corresponding increases or decreases in amplitude. The continuous presence of the E.E.G. during quiescence, even during sleep, its periodicity and its close relationship to attentional shifts, argue for the existence of a permanent automatic activity of the cerebrum, which may become concentrated at specific places during mental work. The further suggestion is made that the E.E.G. may throw some light on the problem of the psychological present, and the general conclusion is drawn, in agreement with Fechner, that the fusion of elementary processes into unitary wholes takes place on the psychological and not on the cortical level.—R. B. MacLeod (Cornell).

82. Bianchi, L. Sui rapporti del origine fra nervo terminale e nervo olfattivo. (On the relations between the origins of the terminal nerve and the olfactory nerve.) *Boll. Soc. ital. biol.*, 1931, 6, 522-523.—The writer advocates the view that the olfactory-terminal system has a unitary neural formation consisting of two parts: one is the olfactory nerve, which derives from a number of ganglion cells scattered in the nasal mucous membrane; the other is the terminal nerve, with its ganglion cells united in a few small ganglia.—A. Angyal (Turin).

83. Bishop, G. H. The relation of nerve polarization to monophasicity of its response. *J. Cell. & Comp. Physiol.*, 1932, 1, 371-386.—Immediately after crushing the nerve the gradient of depression

from uninjured to injured tissue is very sharp. This difference later decreases as some recovery takes place. The nerve can conduct near a crushed region when the demarcation potential is as much as 12 millivolts, whereas 2 to 3 mv. corresponds to block when drugs are used. Monophasic action potentials are obtained in nerve depressed in function without depolarization, as well as immediately after crushing; therefore depolarization is not an essential condition for monophasicity. Repolarization at a killed point gives more diphasic response, because a longitudinally directed potential is set up across the injured ends of the axons; as contrasted to the normal polarization of the membrane parallel to the nerve axis, the potential of which is directed transversely.—O. W. Richards (Yale).

84. Dalma, E. Un nuovo metodo d'introduzione vitale e non vitale di sostanze coloranti nei tessuti: la cromoforesi elettro galvanica. (A new method of introducing coloring substances into living or dead tissues: electrogalvanic chromophoresis.) *Riv. pat. nerv. e ment.*, 1932, 39, No. 1.—The author tried the chromophoretic injection of a solution of methyl blue into the brains of dead or living rabbits. He obtained penetration of the coloring substance at the positive side of the pole and coloration of cellular elements (gangliar and gliar). No effect was obtained by reversing the current.—G. C. Ferrari (Bologna).

85. Hartline, H. K., & Graham, C. H. Nerve impulses from single receptors in the eye. *J. Cell. & Comp. Physiol.*, 1932, 1, 277-295.—The eye of *Limulus* was stimulated with light and the response of the nerve recorded with an oscillograph. In this primitive form there are no synapses or ganglia to complicate the analyses. The nerve may be divided to give regular discharges, indicating a single fiber, and these discharges are associated with the stimulation of a single ommatidium. The discharge of a single fiber is high at first (130 per second). The frequency falls rapidly at first and then reaches a steady value, which is maintained for the duration of stimulation. At high intensities of illumination the discharge is greater and the latent period shorter. The single receptor unit responds to a range of intensities with varying frequency which may be as great as one to one million. The behavior of this photoreceptor is analogous to that of other receptor organs, particularly to those of tension and pressure.—O. W. Richards (Yale).

86. Looney, W. W. Anatomy of the brain and spinal cord. (2nd ed.) Philadelphia: Davis, 1932. Pp. 370. \$4.50.—The embryology and histogenesis of the central nervous system are briefly presented in the first two chapters. Thereafter follows a statement of the facts regarding the external features and internal structure of the various parts of the central nervous system and short discussions of the anatomy of the receptors, of individual neurons, of the sympathetic system, and of the blood supply of the brain. A number of case studies by T. H. Cheavens are given. Some of the illustrations are borrowed from

classical sources, but many of them are originals by Lewis Waters. Though a bibliography is given no attempt is made to present a compendium of evidence regarding controversial points; the work is intended for use as a textbook.—*E. H. Kemp* (Clark).

87. Root, W. S. The influence of carbon dioxide upon the respiration of nerve. *J. Cell. & Comp. Physiol.*, 1932, 1, 239-252.—The rate of oxygen consumption of spiny dogfish lateral-line nerves at 22° C. averages 84.1 cu.mm. per gram of fresh weight per hour (range 25.1-157.0) and the rate of carbon dioxide production averages 59.2 cu.mm. per gram per hour (range 17.3-176.0). The apparent uncorrected respiration quotients average 0.92. The rate of oxygen consumption in the presence of carbon dioxide decreases progressively up to 100 mm. Hg CO₂ tension, when it is 63% of the control value. Further increase up to 300 mm. Hg CO₂ tension produces less effect. In the presence of CO₂, the CO₂ production is slightly more depressed than is the oxygen consumption.—*O. W. Richards* (Yale).

88. Rosenbluth, A. The chemical mediation of autonomic nervous impulses as evidenced by summation of responses. *Amer. J. Physiol.*, 1932, 102, 12-38.—The relations between the responses and the frequency of supramaximal stimulation of autonomic nerves were studied in 9 different ways. The results are examined in the light of several theories which have been previously advanced by other workers. Since the data do not fit into any of these theories, a chemical hypothesis is proposed. "Each quantal nervous impulse liberates a quantal amount of a chemical mediator, M. M combines with some substance H in the effector according to the reaction $M + H \rightleftharpoons MH$. The response is proportional to the concentration of M H, not all-or-none. Free M is destroyed locally, hence relaxation. This destruction occurs at a limited rate, hence possible diffusion to other structures when the concentration exceeds this limit." It is concluded that the effects of spatial summation are small when compared to those obtained by temporal summation.—*C. Landis* (N. Y. Psychiatric Institute).

89. Villiger, E. Anleitung zur Präparation und zum Studium der Anatomie des Gehirns. (Guide to preparation and study of the anatomy of the brain.) (2nd ed.) Leipzig: Engelmann, 1932. Pp. 23. M. 1.50.—*E. R. Willoughby* (Clark).

[See also abstracts 111, 189, 217.]

MOTOR PHENOMENA AND ACTION

90. [Anon.] Oxygen and Everest—another instance of sense differences. *J. Hered.*, 1932, 23, 265-266.—For a person capable of becoming acclimated to high altitudes, an oxygen mask, by upsetting the acid-alkali balance in the blood, produces acute distress on the slightest exertion. For the type that does not acclimate readily the oxygen mask affords great relief when exertion is undertaken at high altitudes.—*B. S. Burks* (California).

91. Carroll, R. P. The effect of practice on the homogeneity of a group. *J. Educ. Psychol.*, 1932, 23, 462-464.—Results from 28 days of drill in silent reading by 28 college students, and from 45 drill periods at making marks with the "wrong" hand, give coefficients of variation which indicate that drill in either function by a comparatively homogeneous group either leaves the subjects as they were or makes them more alike in achievement.—*J. A. McGeech* (Missouri).

92. Cason, H. The pleasure-pain theory of learning. *Psychol. Rev.*, 1932, 39, 440-466.—A discussion of the pleasure-pain theory as formulated by Spencer, Bain, and Baldwin, and as modified in Thorndike's law of effect. The criticisms offered are (1) that the theory applied only to motor learning, (2) that it assumed affects to be inherited, and (3) that it depended on the exploded assumption that pleasure and pain accompany increase and decrease in neural activity respectively. It is pointed out that in all studies of the relative efficiency of learning of pleasant vs. unpleasant materials, the differences, if any, are unreliable. The same arguments which Thorndike used against ideas in animals apply equally well against his pleasure-pain hypothesis; his concept of "effect" has not been objectified and involves the logical error of assuming that what follows an activity can retroact on it. It is concluded that the pleasure-pain hypothesis is not an adequate explanation of learning.—*A. G. Bills* (Chicago).

93. Cresson, A. Le vrai rôle de la volonté dans la réflexion. (The true rôle of will in reflection.) *J. de psychol.*, 1932, 29, 369-400.—The author discusses the ways in which volition gives direction to and controls the course of reflection.—*N. L. Munn* (Pittsburgh).

94. De Giacomo, U. Misurazione del tono muscolare dell'uomo durante l'azione della bulbocapnina iniettata per via endovenosa. (Measurement of the muscular tone of a man during the action of bulbocapnina injected intravenously.) *Riv. pat. nerv. e ment.*, 1932, 39, No. 1.—Using the myotonometers of Maxgold and Spiegel, the author found a masked hypotonia and a lack of hypertonia during the cataleptic phase.—*G. C. Ferrari* (Bologna).

95. Duffy, E. The relation between muscular tension and quality of performance. *Amer. J. Psychol.*, 1932, 44, 535-546.—Graphic records were obtained of pressure upon dynamographs held in each hand during a tapping performance and a discrimination reaction in response to presented pictures. Tension tracings were divided into three groups with respect to smoothness or regularity. The subjects were 18 children of an age range from 2 years 11 months to 3 years 10 months. It was found that: degree of tension correlates .47 with tapping and .48 with discrimination reaction; intelligence shows no significant correlation with either tension or performance; smoothness of tension correlates .60 with quality of discrimination and .23 with tapping. Records of best and poorest performers are analyzed in detail.

In concluding the theoretical discussion it is suggested that moderate tension is in general most advantageous for performance. Phases of the problem for further investigation are pointed out.—*M. N. Crook* (University of California at Los Angeles).

96. Duffy, E. Muscular tension as related to physique and behavior. *Child Development*, 1932, 3, 200-206.—A review of the data obtained from a number of observations and measurements in the Child Development Institute of Teachers' College, Columbia University, together with the results of a number of special studies conducted by various investigators, suggests "the possibility of correlations between muscular tension and various physical and physiological factors, such as weight, body build, and range of systolic blood pressure and of pulse rate. Similar correlations are suggested with various aspects of behavior, including muscular performances, number of physical contacts, number of words used, and degree of restlessness and inattention in such a situation as a mental examination."—*F. D. McTeer* (Detroit City College).

97. Galdo, L. L'attitudine muscolare in rapporto alla direzione dell'attenzione. (Muscular capacity in relation to direction of attention.) *Cerev.*, 1931, 5, 249-264.—By means of Galeotti's ergograph, the writer investigated the relations between muscular capacity and direction of attention. He indicates possibilities of applying his results.—*A. Angyal* (Turin).

98. Goblot, E. De l'intuition. (Concerning intuition.) *J. de psychol.*, 1932, 29, 337-368.—An essay on the rôle of intuition in art, science, and philosophy.—*N. L. Munn* (Pittsburgh).

99. Hellebrandt, F. A., & Miles, M. M. The effect of muscular work and competition on gastric acidity. *Amer. J. Physiol.*, 1932, 102, 258-266.—"Gentle exercise before or after a test meal augments gastric acidity. Protracted exercise is not necessarily depressing, but exhaustive muscular exercise, whether it precedes or follows a test meal, is associated with a diminution of the acidity of the gastric secretion to a level below resting normal, and the decrease is greatest when the exercise is accompanied by emotional excitement."—*C. Landis* (N. Y. Psychiatric Institute).

100. Hemingway, A., & McClendon, J. F. The high frequency resistance of human tissue. *Amer. J. Physiol.*, 1932, 102, 56-59.—"The high frequency resistances of living human tissues have been measured with a high frequency Wheatstone bridge using alternating currents of one million cycles per second. Evidence is given to show that these values are the resistances of the tissues in situ. The high resistance of superficial fat and of bone explain the electrode heating in diathermy and the small heating of bone."—*C. Landis* (N. Y. Psychiatric Institute).

101. Lüderitz, H. Beitrag zur experimentellen Untersuchung des Wahlvorganges. (Contributions to the experimental study of choice reactions.) *Unter. z. Psychol. Phil. u. Päd.*, 1929, 7, 1-94.—Start-

ing from the work of Michotte and Prüm, *Le Choix Volontaire*, the author undertook certain analogous experiments. He had two ends in view: to complete Michotte's experiments by requiring the execution of the chosen operation (which had not taken place in Michotte's experiments, since he and his collaborator had considered the simple fact of having pressed on the signal sufficient to indicate an act of realization) and to show that the hypothesis on which Michotte and Prüm had based their work, that is, that an act of choice is an act of will, was not well founded. A series of combinations of two numbers was used, regarding which the subject had to render a decision in behalf of one of the two proposed operations, i.e., addition or subtraction, multiplication or division. These numbers were exposed according to the Ach method, the reaction time being measured to 1/5 of a second. Thirteen subjects were used, and most of the article is devoted to their reports (1,480). The experiments were conducted in two ways, the O-reactions requiring choice only, and the R-reactions requiring choice and execution. General instructions were analogous to those given by Michotte and Prüm. An analysis of the introspective data obtained led Lüderitz to conclude, as he had supposed originally, that an act of choice is a special process. This result was found both for the O-reactions and for the R-reactions, a result that can be explained by the fact that the subjects considered the two kinds of experiments analogous. The responses did not justify the identification of an act of choice with an act of will, for the volitional act did not intervene except in certain cases and then it was located in the preliminary period, the period of the determining tendency. He found grounds to consider an act of choice simply as a selection process, characterized by the fact that, in the apperception itself of the stimulus, the consciousness of the problem was implicitly found. Thus the numbers appeared, not as neuter quantities, but as elements in a determined task, i.e., addition or subtraction, etc. The motivation was found to be sometimes in the fact of having comprehended the result, sometimes in the criteria used, i.e., observation criteria, such as size, order of numbers, etc., and intellectual criteria, such as comparison and elimination. Often the choice operation depended upon spontaneous selection. It was only when the objective motivation failed that the decision rested on a particular act, which was sometimes an act of judgment and sometimes an act of volition. The volitional act intervened likewise when the instruction demanded the choice of the more difficult operation of the two possible reactions. Lüderitz's data must be studied in detail in order to evaluate his conclusions.—*A. B. Hunter* (Clark).

102. Meister, R. Spiel und Arbeit als gegensätzliche Verhaltensweisen menschlicher Tätigkeit. (Play and work as contrasted aspects of human activity.) *Vjesh. f. Jugendk.*, 1932, 2, 145-154.—Kerschensteiner classifies activity into play, which is carried on for its own sake; sport, which is undertaken for the purpose of increasing one's proficiency;

occupation, which is intermediate between play and work; and work, which alone is carried on in order to complete a task. It is not clear whether he considers the criterion to be the existence of an object apart from the activity or the consciousness of the necessity of attaining that object. Bühler states more explicitly that play is an activity initiated by a desire for pleasure and carried on only as long as it gives pleasure. The criterion is the presence or absence of the pleasure reaction. The author suggests that there is an activity common in adults which lies between these two and is best characterized by lack of seriousness. The distinction between it and work is that between the activity of the casual reader of an argument and that of the author in developing it. Another form is that of the participant in a game where the aim is clearly visualized and great effort may be expended, but where the whole situation lacks high seriousness or importance. There are two kinds of play characteristic of early childhood: pure function play, such as articulatory experimentation, and pure illusion play. Both are far removed from the objectivity of work, but may be regarded as preparation for later life. Then the idea of a task appears, the satisfaction in the attainment of which may be taken advantage of by pedagogy. For the school child work has more purpose, but its aim is closely related to the worker. At this age work may be described as "reflexive" as opposed to "transitive." To attain the third level of work there are such pedagogical devices as encouraging creative hand-work, display, and judging of products and group projects. Although there is some danger of narrowing the concept of work to artistic products, education does well to convert experiences and mental content at all levels into objective expression.—*M. Lee* (Chicago).

103. Müller, E. Beiträge zur Lehre von der Determination. (A contribution to the doctrine of determination.) *Arch. f. d. ges. Psychol.*, 1932, 84, 43-102.—The author reviews the work of Ach on the working of the will, and the later work of Rux. He hopes to verify and carry further the work of Rux, using the combination technique (*kombinierten Verfahrens*). The results are found to agree with those of previous workers, such as Rux, Glaessner and Sigmar. He finds that the introduction of five-lettered syllables is helpful, since it makes possible a greater transposition of marginal consonants. He also finds that the strength of the association of syllable pairs and the accompanying inhibition stand in direct proportion to each other. When the reproduction tendency becomes stronger, the determining tendency decreases in strength. The associative equivalent of the determination furnishes us no absolute measure of the strength of the will. He finds that it is not the quality of recognition which disturbs the behavior of the will, but the character of strangeness. A bibliography of 20 titles is appended.—*F. J. Gaudet* (Dana).

104. Paull, B. Über den experimentellen Nachweis der Enge des Bewusstseins. (Concerning the

experimental demonstration of the restriction of consciousness.) *Arch. u. d. Psychol. Instit. München*, 1931, 2.—A discussion of the historical importance of the question of the fact of mutual exclusiveness of conscious processes with reference to their course is followed by a description of an attempt to demonstrate such a characteristic by the difference in reaction times between the instance where the stimuli (visual and tactual) are presented singly and that in which the presentation of both occurs simultaneously. When the tactual stimulus was presented alone, the reaction time was 0.7 seconds. That to the visual stimulus was 1.4 seconds. With the simultaneous presentation of the stimuli, the reaction time to the tactual stimulus remained 0.7 seconds, but the visual reaction required 2.5 seconds. This last time is considered by the author as consisting of the 0.7 and 1.4 seconds required for the individual reactions plus 0.4 seconds needed for the shift of attention. This is taken as evidence for the existence of conscious restriction.—*T. J. Snee* (Pennsylvania).

105. Pyle, W. H., & Drouin, A. Left-handedness: an experimental and statistical study. *School & Soc.*, 1932, 36, 253-256.—Of the children in three Detroit elementary schools 7% wrote with the left hand. The 7% also tended to show greater skill with the left hand in tapping, steadiness, and marking, as well as greater strength, though a few children were not consistent with the trend. The left-handed group rated lower than the right-handed in intelligence test performance and school achievement, especially, in the latter case, in those studies in which language is important. Slightly more of the left-handed had left-handed relatives than did the right-handed. The right-left speed ratio of the left-handed group was about the same as the left-right ratio of the right-handed group. The authors believe left-handedness to be hereditary and due to right brain dominance. The lower intelligence and achievement records of the left-handed group they think are due to handicaps arising from an environment designed for right-handed subjects.—*H. L. Koch* (Chicago).

106. Robinson, E. S., & Robinson, F. R. Practice and the work decrement. *Amer. J. Psychol.*, 1932, 44, 547-551.—The task of writing *ababab*, etc., as rapidly as possible for a 20-minute period was given to 15 undergraduates. Work periods were scheduled 5 days a week for 3 weeks. Averages of the data show that a marked work decrement appeared in the second period and gradually diminished during the remainder of the 15 periods. Size of writing increased throughout the series, but there is no evidence that this accounts for the decrease in work decrement.—*M. N. Crook* (University of California at Los Angeles).

107. Rohrer, H. Theorie des Willens auf experimenteller Grundlage. (Theories of the will upon an experimental basis.) *Zsch. f. Psychol. u. Physiol. d. Sinnesorgane*, 1932, Ergzsb. 21. Pp. x+192.—This monograph deals with two problems concerning the will: (1) the relation of the will to other mental phenomena, and (2) the origin and source of

the will. After discussing previous theoretical and experimental treatises on these questions the author describes some eight experiments which he performed. His subjects are required: (1) to make a maximal pull on an ergograph and hold it as long as possible; (2) to repeat (1) under distractions; (3) to hold the arm horizontally extended as long as possible; (4) repetition of (3) with electric shocks if the arm begins to drop; (5) to make certain choices; (6) to abstain from eating in the presence of food after a period of hunger. 45 subjects were used in the group of experiments; each was required to give a detailed introspective report regarding the conscious content during the experiment. The results indicate that: (1) will is directly related to feeling; feeling arouses positive acts of the will with the purpose of either increasing the pleasant experience or decreasing the unpleasant experience; (2) attention is a component of the will; (3) the strength of the will is dependent upon the intensity of the pleasant or unpleasant feeling; the strength of the will can be increased or decreased by the appearance of a new motive. The author derives three general laws of the will.—*C. V. Hudgins* (Clarke School).

108. Rosenthal, J. S. *Typology in the light of the theory of conditioned reflexes. Character & Personality*, 1932, 1, 56-60.—The author briefly discusses the results of the Pavlovian experiments, and then proceeds to show that dogs which have been used in the conditioned response experiments can be divided into what are essentially the Hippocratic types. Melancholics are slow in adaptation to surroundings and in the formation of conditioned reflexes; easily put to sleep with bromide; easily hypnotized; extremely confused with change of environment; generally weak and easily inhibited; and exhibit transitory and feeble reflexes. With the choleric, excitation rather than inhibition predominates. They are difficult to hypnotize. In the sanguines, there is a good balance between excitation and inhibition and a pronounced reaction of orientation; a marked liveliness and agility; and a tendency to go to sleep easily in uninteresting surroundings. The phlegmatics are also well balanced as to excitation and inhibition; pay little attention to environmental changes; and are more quiet and sedate but consistently remain awake. The results also show that type can be changed by education. Frequently a dog which, no doubt, belongs to a strong type, is weak and cringing when brought into the laboratory, due to the rigorous life he has been living. The limitations of application of these results to man, due to a more complicated nervous system, are recognized, but there are some striking similarities to be recognized in the two species.—*M. O. Wilson* (Oklahoma). [See also abstracts 40, 43, 53, 55, 67, 77, 81, 113, 116, 117, 158, 186, 316, 346.]

PLANT AND ANIMAL BEHAVIOR

109. Bousfield, W. A., & Sherif, M. *Hunger as a factor in learning. Amer. J. Psychol.*, 1932, 44, 552-554.—This experiment suggests a method for meas-

uring the hunger drive. The eating responses of rabbits and of chickens after hunger periods of various lengths were interrupted by a loud noise. The length of time after the interruption until the animal returned to eating was measured in each case with a stop-watch. It was found that (1) in general, the greater the degree of hunger the shorter the interval of cessation of eating, and (2) in the cases of the longer fasts, the larger the number of trials (the more practice) the shorter the interval of cessation of eating.—*M. N. Crook* (University of California at Los Angeles).

110. Chambers, L. A., & Gaines, N. *Some effects of intense audible sound on living organisms and cells. J. Cell. & Comp. Physiol.*, 1932, 1, 451-471.—Intense sound of 8900 frequency set up by a magnetostriiction oscillator destroys cells, due to intracellular ebullition of gases from the compression and rarefaction by the sound waves. Frogs are killed in flasks without water more readily than when immersed. A more effective direct treatment injures from tensions and water hammering resulting from cavitation. The destructive sound waves may be used to sterilize milk with a continuous flow technique without heating.—*O. W. Richards* (Yale).

111. Chu, H. N. *The cell masses of the diencephalon of the opossum Didelphis virginiana. Monog. Nat. Res. Instit. Psychol., Acad. Sinica*, 1932, No. 2. Pp. 36.—The author examined more than thirteen series of opossum brain cut in different planes and stained by both Weigert and Nissl methods. An analysis of the structural pattern of the cellular masses in the five main parts of the diencephalon was made, and a general description of each kind of nuclei was also given. It is concluded that the thalamus of this animal is very similar to that of the rat as described by Gurdjian, and the rabbit as described by Hollander. The dorsal thalamus of the opossum is rather poorly developed when compared with that of the dog and cat. The hypothalamus and the epithalamus are relatively well developed, as they are in the rodents and insectivores. A bibliography of 40 articles and 14 plates.—*C.-F. Wu* (Nat. Res. Instit. Psychol., China).

112. Dörr, J. N. *Vogelzug und Mondlicht. Sitzber. Akad. Wiss. Wien., Math.-naturwiss. Kl., Abt. 2a*, 1932, 141, 129-162.—*R. R. Willoughby* (Clark).

113. Dusser de Barenne, J. G., & Koskoff, Y. D. *Flexor rigidity of the hind legs and priapism in the "secondary" spinal preparation of the male cat. Amer. J. Physiol.*, 1932, 102, 75-86.—The results of "secondary" spinal transection following "primary" decerebration of the cat show that a syndrome appears which consists of a strong spring-like flexor rigidity in the hind legs associated with priapism. The flexor rigidity is a reflex phenomenon in which exteroceptive as well as proprioceptive impulses are involved. The flexor rigidity disappears when the animal is lifted from the table or placed in a supine position, showing that the stimuli derive from contact of the ventral parts of the body with the table when in a prone position. This syndrome is regarded

as a copulation reflex pattern released in the lumbosacral cord after "secondary" spinal transection.—*C. Landis* (N. Y. Psychiatric Institute).

114. Garrett, H. E. "A question of ethics": a rejoinder. *Amer. J. Psychol.*, 1932, 44, 580-581.—This is a reply to a criticism by Ellis of the *Listener's Notebook*. Garrett defends in particular his discussion of animal learning, by citing the statements of leading animal psychologists.—*M. N. Crook* (University of California at Los Angeles).

115. Keller, H., & Brückner, G. H. Neue Versuche über das Richtungshören des Hundes. (New experiments on the directional hearing of the dog.) *Zsch. f. Psychol.*, 1932, 126, 14-37.—Earlier experiments of Engelmann's were repeated and extended, with the same general results. Dogs were trained to respond to the sound of a buzzer concealed behind one of a number of screens, arranged around the dog in the form of a circle. Care was taken to exclude visual and olfactory cues and cues coming from the experimenter. The best of the three dogs studied was able to discriminate between sound sources 15 cm. apart and 5 m. away. Doubt is cast upon the validity of an explanation of sound localization in terms of differences in time of stimulation of the two ears, and further support is found for Goldstein's conclusion that the process of auditory localization functions best when it is undisturbed by secondary visual factors, and can take place as a purely physiological process of "turning toward."—*R. B. MacLeod* (Cornell).

116. Kolosvary, G. De la variabilité des phénomènes psychologiques et de la théorie de M. Etienne Rabaud. (Concerning the variability of psychological phenomena and the theory of Rabaud.) *J. de psychol.*, 1932, 29, 473-479.—A discussion of the variability of instinctive behavior in animals.—*N. L. Munn* (Pittsburgh).

117. Ludwig, W. Das Rechts-Links-Problem im Tierreich und beim Menschen. (The right-left problem in animals and man.) Berlin: Springer, 1932. Pp. xi+496. M. 38.00.—*R. R. Willoughby* (Clark).

118. Mast, S. O., & Prosser, C. L. Effect of temperature, salts, and hydrogen-ion concentration on rupture of the plasmagel sheet, rate of locomotion and gel/sol ratio in *Amoeba proteus*. *J. Cell. & Comp. Physiol.*, 1932, 1, 333-354.—The thin plasmagel sheet at the anterior end of the amoeba frequently ruptures during locomotion, but the rate of locomotion is not specifically correlated with the number of breaks. The rate increases to a maximum at about 24° and decreases at higher temperatures. Salts increase the rate of locomotion with maximum rates at about .0005N CaCl₂, MgCl₂; .001N NaCl; .0001N KCl. The effect of hydrogen-ion concentration probably also depends on salt concentration. The effect of salts on gelation of the plasmagel sheet is given.—*O. W. Richards* (Yale).

119. T'ang, Y., Oh'in, K., & Tsang, Y. H. The effect of a vegetarian diet on the learning ability of albino rats. *Contrib. Nat. Res. Instit. Psychol.*,

Acad. Sinica, 1932, 1, No. 1. Pp. 27-71 vegetarian rats and 67 control rats fed with normal mixed diet were required to learn to thread a water maze of ten alleys, composed of removable and reversible partitions, and kept constant at 19°-19.5° C., escape from water being used as incentive. Most of the rats began the task of learning at the age of 100 days. Each animal was experimented on for 14 periods, 6 trials being given each period. The learning was divided into 5 stages, increasing in difficulty by rearranging the partitions of the maze. Three criteria were used in comparing these vegetarian and normal rats: (1) number of trials before mastery of the maze, (2) total time spent in water before mastery, and (3) largest number of consecutive errorless trials in the last ten periods, i.e., after the rats were required to thread the whole maze. From the obtained results the authors conclude that (1) the male vegetarians were very probably inferior to the male normals in learning ability according to any of the three criteria of comparison; (2) it is not certain that the female vegetarians were inferior to the female normals, though there is some indication that the former took more trials to reach the same stage of mastery; (3) the vegetarians tended also to be a little more variable than the controls; (4) sex difference in average ability and variability is larger in the normals than in the vegetarians; and (5) the difference in learning ability between the vegetarians and the normals was not large, there being considerable overlap. The reasons why the difference should be considered as real, but not more marked than the data actually show it to be, have been indicated in the paper. 9 tables and 12 references.—*C.-F. Wu* (Nat. Res. Instit. Psychol., China).

120. Wiechulla, O. Beiträge zur Kenntnis der Lichtwachstumsreaktion von Phycomyces. (Contributions to the knowledge of the light-growth reaction in *Phycomyces*.) *Beitr. z. Biol. d. Pflanzen*, 1932, 19, 371-419.—*R. R. Willoughby* (Clark).

EVOLUTION AND HEREDITY

121. Carris, L. H. Hereditary blindness. *J. Hered.*, 1932, 23, 305-311.—Assuming that 10% of those who are blind are blind from inheritable causes, we have one out of every 10,000 so affected. Twelve types of hereditary blindness are listed.—*B. S. Burks* (California).

122. Carter, H. D. Family resemblances in verbal and numerical abilities. *Genet. Psychol. Monog.*, 1931, 10, 1-104.—The Curtis Standard Research Tests in Arithmetic, Series B, and Vocabulary Tests A and B of the University of Minnesota College Aptitude Tests were administered to 108 families (216 parents, 230 children) in which both parents and one or more children were available. Results showed a slight decline in ability with age on the part of the husbands, negative correlation of age with years of education for both fathers and mothers, and no significant sex differences among the children in either vocabulary or arithmetic ability. In the

case of adults, the males were "significantly superior in arithmetic ability, which fact is probably due to differences in practice," while the women were slightly superior in vocabulary but not significantly so. Years of education of parents showed little relation to their arithmetic ability, but correlated with vocabulary to the degree of .53 for men and .49 for women. The author found a slight resemblance between husbands and wives in vocabulary, but none at all in arithmetic ability. Sibling correlations in this study are higher for vocabulary (.35) than for arithmetic (.21) and suggest "that assortative mating, which is likewise more pronounced in the case of vocabulary than for arithmetic, is playing an important rôle." The mid-parent-child correlation is .17 for vocabulary and .19 for arithmetic, but there is a marked tendency for the child to resemble one parent more than the other. "Matings of two persons both of whom are superior in these tests produce more children who are superior in these test abilities than do matings of two people either or both of whom are inferior in these test abilities."—*M. V. Louden* (Pittsburgh).

123. *Clarke, A. E. Identical quadruplets. J. Hered., 1932, 23, 257-259.*—The set consists of four girls born in Michigan May 19, 1930. At one year they were all beginning to talk; three were creeping and one beginning to creep. Close similarity was found in friction ridge patterns.—*B. S. Burks* (California).

124. *Downey, J. E. Familial trends in personality. Character & Personality, 1932, 1, 35-47.*—The purpose of this study was to determine whether administration of a personality inventory to a family group would "give any added insight into the personalities of individuals who were already intimately known, and, conversely, whether the results would illuminate in any way the inventory itself." The Bernreuter Inventory was given to a family of ten brothers and sisters, a group of which the author was a member. This inventory contains four scales: B1-N, a measure of neurotic tendency; B2-S, a measure of self-sufficiency; B3-I, a measure of introversion-extroversion; and B4-D, a measure of dominance-submission. As to familial trends, there is rather close agreement between the judgments of the author and inventory ratings, and the inventory also aided in crystallizing certain traits whose presence was not clear to the author until after the inventory was given. However, it does not throw into relief some pronounced personality differences between certain individuals. Coefficients of correlation (Spearman rank) between the author's rankings and three of the traits are: B1-N, .18; B3-I, .20; B4-D, .66. The coefficient of correlation between the author's rankings and scores on the Neymann-Kolstedt Test (which was also administered to eight of the subjects) is .60. There is also some speculation as to the part played by nature and nurture in determining the responses to the questionnaire, as well as some indication of constitutional differences among the

individuals which might throw light on the results.—*M. O. Wilson* (Oklahoma).

125. *Kraulis, W. Zur Vererbung der hysterischen Reaktionsweise. (Inheritance of the hysterical type of reaction.) Zsch. f. d. ges. Neur. u. Psychiat., 1931, 196, 174-258.*—Kraulis makes a distinction between socially abnormal personalities with the hysterical type of reaction (asocial or antisocial psychopaths, who throughout life are a burden to society) and "episodic hystericals," in whom not the abnormal personality but the episodic hysterical reaction stands in the foreground. He recognizes the weakness of a clinical classification founded on social reactions, but he could not make a satisfactory division solely on personality types. He compared the family histories of 106 probationers for whom sufficient material was available, among admissions to the psychiatric clinic of Munich between 1906 and 1924, with the probability of the hysterical reaction among the general population as estimated by Luxenburger-Schulz. From the statistical results, he reaches the conclusion that a special, inheritable *Anlage* underlies the hysterical type.—*M. E. Morse* (Catonsville, Md.).

126. *Krause, W. Experimentelle Untersuchungen über die Vererbung der zeichnerischen Begabung. I. (Experimental investigations of the inheritance of drawing ability. I.) Zsch. f. Psychol., 1932, 126, 86-145.*—376 artistically untrained individuals were studied, of whom 102 were fathers, 102 mothers, 108 male children and 64 female children. Each was required to make 8 drawings, 4 of memorial or imaginary objects and 4 of objects or pictures before him, and each of the 8 sets of drawings was arranged in order of excellence by two independent judges. The results were grouped in various ways so as to render possible generalizations about sex, age and family relationships. Some of the principal observations were: (1) Males proved to be definitely superior to females at every age and in each series of drawings. (2) Parents tended to stand in order of excellence above children of the same sex of school age and below children of the same sex beyond school age. (3) Parents and children of the same family showed a definite positive agreement in the quality of their productions. (4) Parents and children of the same sex showed a positive agreement in the quality of their productions. Each generalization is based on a study of rankings within individual series and of rankings of averages of all series. No statistical measures of reliability are included.—*R. B. MacLeod* (Cornell).

127. *Ley, A. Sur la stérilisation des dégénérés. (On the sterilization of degenerates.) J. de neur. et de psychiat., 1931, 31, 606-700.*—The author gives a brief history of four sterilized cases, a man and three women of psychopathic and intellectually inferior type. Sterilization is recommended especially for imbeciles and psychopaths who cannot control their sexual instincts. It will permit these individuals to remain at liberty and to do some useful work instead of being a burden to the community. No special laws

regulating the sterilization of the unfit are necessary, as each case must be considered individually by the physician, who should take the responsibility of applying the most suitable measures to the particular patient. A bibliography of 13 titles is given.—*H. Sys* (New York City).

128. Newman, H. H. Mental and physical traits of identical twins reared apart. *J. Hered.*, 1932, 23, 297-303.—Twins "B" and "D," constituting the author's fifth case, are women of 38. They were separated at the age of 14 months, not seeing each other again until the age of 16. At 20 they lived together a year, until the marriage of D. About 2 years later B married. B finished 11th grade, lived in good-sized towns, married into a comfortable financial situation, and had four children. D finished 10th grade in country schools, worked hard after her marriage, and reared six children. Scores on four mental tests were closely similar (7 months on Stanford-Binet in favor of B). B had 6 months' advantage on the Stanford Achievement Test. Scores were quite similar on three personality tests, but rather different on one. A marked difference has arisen in physical condition since age 20.—*B. S. Burks* (California).

129. Pearl, R. Contraception and fertility in 2,000 women. *Human Biol.*, 1932, 4, 363-407.—This first report covers less than one-sixth of the data from hospitals in five large cities. The material was gathered by a combined questionnaire and case method procedure and the types of records and instructions are given in detail. The data come from the lower social levels of society. The women had an average of 2.75 pregnancies per woman, the whites 2.68 and the negroes 2.89. Some attempt to prevent conception had been made by 35.8% of the white women and 15.4% of the negro women. The methods used were such that the burden of limitation was born by 48.7% of the men, 49.3% of the women and only 2% jointly. A new and more precise method for calculating person-years of exposure to risk of pregnancy is described. The methods of contraception practiced by the white women reduced the pregnancy rate per person per unit of time about 20% below that of a similar group not practicing contraception. The reverse occurred with the negro women, where the exposure risk is higher among those using contraceptives. The women who practice contraception seem to be innately more fertile than those who do not.—*O. W. Richards* (Yale).

130. Pintus, G. Sulla trasmissione ereditaria del tremore essenziale. (Concerning the hereditary transmission of essential tremor.) *Riv. pat. nerv. e ment.*, 1932, 39, No. 1.—The author studied the transmission of this disease in 200 members of the same family. In some of the subjects the trembling was of the type characterized by short and rapid tremors; in others, by long and slow tremors. Trembling is transmitted, as are diseases of the predominantly monogenic type, by crossings between heterozygous and normal individuals. Neither homology nor homochrony is respected; but the dominance repeats itself after Mendelian principles. The author makes no

exact statement relative to the prolificacy and longevity of the subjects, for he has no data relative to the rest of the population.—*G. C. Ferrari* (Bologna).

131. Popenoe, P., & Brousseau, K. Hereditary ataxia. *J. Hered.*, 1932, 23, 277-282.—A new family history of hereditary ataxia is published in which the affection behaves as a typical recessive. Other studies have shown that dominance is variable for these genes, and the action of modifying genes is conspicuous. Since the disease is incurable, eugenically it calls for sterilization of affected individuals.—*B. S. Burks* (California).

132. Preston, G. H., & Antin, R. A study of children of psychotic parents. *Amer. J. Orthopsychiat.*, 1932, 2, 231-238.—Careful psychiatric histories of all children under 18 years whose parents were admitted to three public mental hospitals and diagnosed psychotic were obtained and studied, and the findings compared with similar studies of "normal" children and of children of child-placing agencies. Findings: it seems fair to assume that children of psychotic patients do not present greater need of psychiatric assistance than "normals" and rather less than "child-placing" wards.—*A. G. Reynolds* (Winchester, Mass.).

133. Rodewald, —. Die Unfruchtbarmachung geistig Minderwertiger im Lichte der Medizin und des Rechts. (Sterilization of the mentally inferior in the light of medicine and of law.) *Monatssch. f. Krimpsychol. u. Strafrechtsref.*, 1931, 22, 705-720.—The writer comes to the conclusion that, for reasons of racial hygiene and eugenics, a legal regulation of sterilization of the mentally inferior is necessary. He rejects compulsory sterilization, because of the still unsatisfactory status of investigation of heredity, but recommends sterilization upon eugenic indication with the wish or consent of the patient. The means suggested is sterilization in the strict sense, "which has no harmful effects upon the bodily and mental condition of the individual, since the gonads remain." In cases of diseased or criminal sexual impulses castration is a safeguard.—*W. Beck* (Leipzig).

134. Winston, S. Some factors related to differential sex-ratios at birth. *Human Biol.*, 1932, 4, 272-279.—An important relationship is shown to exist between socially desirable factors and a higher ratio of males born alive to females born alive. In the more nearly optimum environments more adequate provision is made for the unborn child, hence there is a greater chance for the survival of the fetus and a greater percentage of males born alive.—*O. W. Richards* (Yale).

[See also abstract 232.]

SPECIAL MENTAL CONDITIONS

135. Angyal, A. Warum vergisst man die Träume? (Why do we forget dreams?) *Zsch. f. Psychol.*, 1930, 116, 191-199.—Dreams are forgotten because the passing from the waking state to sleep and from sleep to waking breaks the continuity of mental life.

However, this explanation is incomplete, for, in spite of the break produced by sleep, we are able to remember the happenings of previous days. This ability to remember depends, not on simple associations, but on the possibility of reconstruction, a condition which exists for the happenings of normal life but is lacking in the dream state. In the latter state there is no measure of time, stability of place, identity of person, or any consistency of natural laws.—A. B. Hunter (Clark).

136. Behn, S. *Psychologische Methoden der Traumforschung*. (The psychological methods of dream interpretation.) *Abderhaldens Handb. d. biol. Arbeitsmethoden*, 1925, Abt. VI, B1, 107-130.—We can speak only tentatively of methods of dream analysis, for even our best methods cannot assure us that the knowledge gained by using them is adequate and reliable. We do not have even a complete description of what actually does or may happen in a dream condition. We cannot expect good results as long as we regard the dreams merely as a succession of pictures. The possibility of experimenting with dreams is very limited: the dreamer is not a subject for experimentation as in other psychological experiments. We cannot ask the subject to dream this or that and then study his behavior, but we can make only occasional observations. The method of weak stimuli is the only experimental method in dream analysis, as it tries to produce dreams or to change existing dreams by the application of weak sensory stimuli. The difficulty in interpreting the results obtained by this method is that we do not know which stimuli (natural or artificial) reached the dreamer's sensitivity. Many other methods are also described and their technical and theoretical limitations discussed in detail.—Z. Piotrowski (Columbia).

137. Benedek, T. *Todestrieb und Angst*. (The death instinct and fear.) *Int. Zsch. f. Psychoanal.*, 1931, 17, 333-343.—The ideas of irreversible configurational processes in the cell, as introduced into biology by Ehrenberg, and the defensive ferments produced by the body through symbiotic hormones, are considered by the writer to be physiological verifications of the death instinct conceived by Freud in the light of psychological considerations. The Freudian explanation of fear as a danger signal provided by the ego is satisfying only from the economic point of view. Fear, in a dynamic sense, must be considered as the perception of the death instinct or of primary masochism (mixture of drives) liberated in the organism.—L. Bernfeld (Berlin).

138. Bien, E. *Das Koitusverbot in der Behandlung der psychischen Impotenz*. (The prohibition of coitus in the treatment of psychical impotence.) *Zentbl. f. Psychotherap.*, 1932, 5, 400-418.—The importance of the prohibition of coitus and other forms of sexual expression as a therapeutic aid in the treatment of impotence is stressed, and suggestions are made as to the proper use of this method in specific types of impotence.—B. B. MacLeod (Cornell).

139. Calligaris, G. *Le catene lineari del corpo e dello spirito. Il sogno rivelatore*. (Linear links be-

tween the body and the mind. Dreams as revealers of such links.) *Riv. sper. fren.*, 1930, 53, 486-519.—The author uses dreams to illustrate his theory regarding the correspondence which he believes exists between certain lines which can be traced on the surface of the body and certain visceral activities and between these same lines and mental operations. He found that a slight stimulation just before sleep of the lateral bodily line produced dreams of incoherence and mutilation. Stimulations of the axial line gave dreams of love. The first interdigital line gave dreams involving psychological disorientation; the axial line of the index finger, dreams involving memory, with preference for infantile memories; the second interdigital line, anger dreams; the axial line of the middle finger, confusion dreams; the third interdigital line, dreams involving pain; the axial line of the fourth finger, happy dreams; the fourth interdigital line, dreams having lilliputian aspects; and the axial line of the little finger gave dreams involving fears. The same effects were obtained by a superficial compression of the viscera with which the various lines are connected, a fact which is in accord with the law of chiro-splanchnic relations.—A. B. Hunter (Clark).

140. Chadwick, M. *The psychological effects of menstruation*. New York, Washington: Nervous & Mental Disease Pub. Co., 1932. Pp. 70.—The book is divided into three sections. The first section deals with the history of attitudes toward menstruation and psychological disturbances accompanying menstruation. Mention is made of the horror and guilt, followed by tabus and superstitions, which have always been associated with the menstrual function. Striking similarity is noted between the characteristics of the witches of medieval history and those which are noted in women during the menstrual period or during the menopause. The second section, on the menstrual cycle in childhood, discusses the menstrual-like periodicity in childhood; the effects upon a child of knowledge concerning menstruation in the adult; and the influence upon nervous development of the psychic concomitants of beginning menstruation—guilt, castration and death fantasies, together with hostility to mother and love for the father, the latter sometimes reversed. The section on the adult menstrual cycle discusses psychological and physical disturbances that may occur in connection with the menstrual function; how these phenomena affect young women, and how they are conditioned by early trauma and primitive guilt concerning menstruation; how these same phenomena affect older women, especially those passing through the climacteric; how menstruation affects the general continuity of life and the general physical health of women. The material upon which the book was based was taken from literature, from psychoanalytic data obtained from children and adults, and from experience in general and gynecological hospital wards.—M. G. Willoughby (Clark).

141. Chadwick, M. *Menstruationsangst*. (Fear of menstruation.) *Zsch. f. psychoanal. Päd.*, 1931,

5, 184-189.—Fear of menstruation is expressed in the tabus of primitive peoples as well as in the reactions of small children when they learn the facts about menstruation in any form. It is a complex reaction due to several connected factors: a physiological reaction to the chemical characteristics of the odor; an olfactory memory of birth, strengthened by the anxiety suffered at that time; finally, a feeling of guilt due to the unconscious desire to shed blood, and the consequent fear of death; or the feeling of guilt always associated with masturbation and intercourse. The child's reaction is perhaps founded on the actual perception of the changed psychic condition of the menstruating woman, who experiences at this time an increase of hatred against men and impatience with children, and thus easily becomes in reality unpleasant to her husband and children. Even in prepubertal children, one can observe symptoms of nervous disturbance corresponding to the menstrual periodicity—fear of robbers or some threatening danger, or marriage fantasies, which may even lead to suicide fantasies. The author reports a case in which menstruation was interpreted as an accident, and after an explanation, the girl showed the need of celebrating this proof of adulthood, an attitude which recalls the puberty rites of primitive peoples.—M. E. Morse (Hyattsville, Md.).

142. Deutsch, H. Über die weibliche Homosexualität. (On female homosexuality.) *Int. Zsch. f. Psychoanal.*, 1932, 18, 219-241.—Analyses of eleven cases of female homosexuality, none of which gave any indication of a constitutional deviation in the direction of masculine characteristics, is the basis of this paper. Hate against the mother and libidinal desire for her were found to be older than the Oedipus complex. Libidinal turning away from mother to father meets with greater difficulties the more aggressive and sadistic the disposition of the little girl. Feeling of guilt, resulting from pre-Oedipal and augmented by Oedipal aggression, is relieved by overcompensation, i.e., by renunciation of father and persistence in mother attachment: "I don't hate you; I love you." Contributory influences from expectation of wish-fulfillment by father, disappointment in him due to refusal to gratify her, and wound to narcissism incident to the realization of permanent lack of penis, during the Oedipal period, turns the girl's libido to the earlier love object (the mother) again, and the more intensely the stronger the earlier attachment. The economic advantage of the new turning to mother (i.e., not simple fixation) lies in release from feeling of guilt and in the protection from the threatened loss of love object: "If my father won't have me, and my self-respect is so undermined, who will love me, if not my mother?" There is abundant evidence of this bisexual oscillation, which may eventuate in neurosis, heterosexuality or inversion. Before return to the mother attains the character of a genuine inversion, the mother's prohibition of masturbation (responsible for intense ideas of revenge on her) must be supplanted by permission. Phallic-masculine form of homosexuality is the outstanding

one, but more infantile, pregenital urges hide behind it. The author's cases provide confirmation for Freud's and Jones's finding that the disposition to female homosexuality is in the oral-sadistic phase of libidinal development. Stress is also laid on the importance of the thrust into passivity from the active phallic phase ("Passivitätsschub"—associated with the wish for an anal child by the father) in the development of normal femininity.—D. Feigenbaum (New York City).

143. Egner, F. Humor und Witz unter strukturalpsychologischem Gesichtspunkt. (Humor and wit from the standpoint of structural psychology.) *Arch. f. d. ges. Psychol.*, 1932, 84, 330-371.—Like esthetic taste, taste in humor varies with age, sex, race, and nationality. The author contrasts the humor of the German, the Englishman, the American, the Frenchman, and the Jew, and mentions briefly that of the Italian and the Spaniard. These comparisons are preceded by an explanation of the typology of Jaensch, because the author believes the personality types predominating in certain countries affect the national humor. The German, for example, is typically an idealist. German humor is full of sympathetic feeling. Wit, which is coldly intellectual and objective, is not German. The Englishman is typically practical, averse to abstraction and systematization. His struggle for life is difficult. He is industrious and true to his obligations, but he is not an enthusiastic laborer. His heart is in play. Hence the Englishman fights off the seriousness of life by fine irony. American humor, as revealed in the films, is primitive. It delights in the exaggerated and the grotesque. In Mickey Mouse, animals behave like human beings—at least like Americans. Films in which children and dogs are the heroes make a similar impression of unreality. From the German standpoint, American humor often seems silly. According to this author, the French have no humor. They have wit. French laughter is ridicule, always cold and stern, often cruel and hostile. The Jew is also witty. Wit rejoices in sharpness and brevity. It involves mental mobility and facility in forming associations. It links the most sacred things and the lowest together. The erotic is a favorite theme. It esteems word play above realities. The Italian is the child of the sun. His laughter is bright and free from bitterness. The Spaniard, like the American, is primitive and inclined to the grotesque.—M. F. Martin (West Springfield, Mass.).

144. Ensslen, N. Zur Psychologie des Schuldbewusstseins. (On the psychology of the consciousness of guilt.) *Arch. f. d. ges. Psychol.*, 1932, 84, 387-488.—There is an introductory discussion of method. Genuine consciousness of guilt cannot be investigated experimentally. It can only be observed introspectively in the course of real life and made available for scientific purposes either (1) when the psychologist analyzes his own experiences of guilt, (2) when he supplements his own introspections with recollections of confessions or with data from autobiographies, or (3) when he systematically investigates

the experiences of his acquaintances. In the present study, a questionnaire was given to 22 trained observers (13 men and 9 women) several of whom were professional psychologists. The purpose was to secure a description of the consciousness of guilt in all its actual modes of occurrence, and to discover the time and circumstances of its arousal and its effects upon the subject. Introspections are quoted voluminously.—*M. F. Martin* (West Springfield, Mass.).

145. Fenichel, O. Outline of clinical psychoanalysis. *Psychoanal. Quart.*, 1932, 1, 292-342.—This second installment contains the second and third chapters. Chapter II deals with anxiety hysteria, indicates its more primitive character as compared with conversion hysteria, and shows its fundamental fear basis manifested by phobias. The anxiety is considered a mechanism of repressing forces, and phobic mechanisms are characterized by outward projection of internal fears upon definite external objects. States of maximal tension with consequent "id anxiety" lead to danger anticipation with consequent "ego anxiety." Phobia development follows avoidance of the perception producing anxiety, thereby transforming instinctual conflict into object fear. The rôle in phobias of primal scenes, Oedipus, and castration complexes is elaborated. Chapter III deals with hysteriform conditions. Organ libido and hypochondriacal reactions are discussed as organ neuroses originating from object libido transformed into organ libido as a result of regression or narcissism with consequent hypercathexis. Actual neurosis, pathoneurosis, and organ neurosis are elaborated psychoanalytically. Differentiation is made between hypochondriacal sensation and anxiety. In pathoneurosis the psychological process is increased in organ cathexis in response to physical cause by libido withdrawal from objects with consequent increase in narcissism, often in relation to some one organ. Treatment is determined by the libido structure.—*M. H. Erickson* (Worcester State Hospital).

146. Fischell, E. Untersuchungen über die Entwicklung weiblicher Interessen auf Grund von Selbstdarstellungen. (Investigations on the development of feminine interests on the basis of autobiographies.) Paderborn: Schöningh, 1932. Pp. 93.—*R. R. Willoughby* (Clark).

147. Freud, S. Vier psychoanalytische Krankengeschichten. (Four psychoanalytic case histories.) Vienna: Int. Psychoanalyt. Verlag, 1932. Pp. 463. M. 9.00.—*R. R. Willoughby* (Clark).

148. Freud, S. Ueber die weibliche Sexualität. (On female sexuality.) *Int. Zsch. f. Psychoanal.*, 1931, 17, 317-332; also *Psychoanal. Quar.*, 1932, 1, 191-209.—See VI: 4821.—*S. Bernfeld* (Berlin).

149. Freud, S. The acquisition of fire. *Psychoanal. Quart.*, 1, 210-215.—Freud discusses the psychoanalytical significance of the Promethean fire theft myth. The carrying of the fire in the hollow stalk suggests the process of reversal—man carries not fire, but the means of extinguishing it, the opposite—in

his hollow penis stalk. Second, the sacrifice of the gods, found also in the legends of other peoples, suggests the cheating of the id by failure to extinguish the fire by urine. The third element, of the punishment of the fire-bringer by the daily consumption and renewal of the liver—ancient seat of all passions—by a bird (phallic symbol), suggests the resentment of instinct-ridden humanity toward a culture hero. The analogies of fire warmth and erotic passion, darting flames and active phallus, the phoenix that rises rejuvenated from early fiery death, and the myth of the water dragon destroyed by fire all lead to psychoanalytical conjecture concerning the essential origin of this type of legend.—*M. H. Erickson* (Worcester State Hospital).

150. Harms, E. Das "normale" Genie. (The "normal" genius.) *Zentbl. f. Psychotherap.*, 1932, 5, 343-351.—The writer believes that Lange-Eichbaum and Herzberg have placed undue weight upon mental disorders in the problem of genius. In this article he discusses "the psychical dispositions of the healthy genius." The health of the genius presupposes a kind of equilibrium between his rare positive talents, which may lead to pathogenic effects, and other mental contents.—*C. W. Fox* (Rochester).

151. Hárnik, E. J. Pleasure in disguise, the need for decoration, and the sense of beauty. *Psychoanal. Quart.*, 1932, 1, 216-264.—The first part of this article deals with the specific ideational content of the castration anxiety in transvestitism. Two cases are cited with the analytical findings, which reveal that their transvestitism originated in a castration anxiety compensated for by a denial of any possible lack of a penis through concealment by clothes. The second part of the article discusses empirically and theoretically observations on the need of ornamentation, and gives a hypothesis of the origin of the sense of beauty. Reference is made to analytical findings of the equation of clothing with genitalia, particularly prepuce, and the primitive customs of cynodeme, incision, and circumeision. Penis bags and pubic girds are described and their theoretical significance indicated. Among the Bakiri women the pubic apron is a definite concealment of penis lack, and among southern Slavs an apron is an object of marked erotic attraction. Body ornamentation results in an identification of clothes with body surface and represents a sublimation of anal impulses characteristically occurring at developmental periods; also occasionally increasing repression of id impulses and consequent erotization of the skin, and thereby narcissistic compensation for object deprivation—specifically, penis lack. Theoretical significances of the development of the hairless state of man are mentioned, and these postulate a concomitant compensation by decorative measures. Third, speculation is made upon the mental processes producing a "sense of beauty" and the author suggests the possibility that hair loss constituted a phylogenetic prototype of the castration complex. Also the suggestion is made that primitive esthetic development may have been in response to aim-inhibited impulses when immediate

sexual pleasure was renounced with temporary contentment from associated object pleasure. An 80-item bibliography is appended.—*M. H. Erickson* (Worcester State Hospital).

152. *Horney, K. Die premenstruelle Verstim-mungen.* (Premenstrual depressive moods.) *Zsch. f. psychoanal. Päd.*, 1931, 5, 161-167.—These appear to stand nearer to normal experience than the menstrual depressive moods. They have no connection with a neurotic interpretation of the bleeding. Some cases concern women who, because of external circumstances, must repress the libido, which is increased in connection with menstruation. They convert into depression the anger caused by the renunciation. Other women have inner inhibitions. In these cases, the increased libido as such is not the cause of the premenstrual moods, but the cause is rather the intense wish for a child, reawakened by approaching menstruation and repressed with equal intensity. Hence the marked relief with the onset of menstruation, which puts an end to the pregnancy fantasies. The psychic processes may differ decidedly, however, in details, e.g., in one of the cases the idea of sacrifice stood in the foreground.—*M. E. Morse* (Hyattsville, Md.).

153. *Jalota, S. S. The unconscious.* *Indian J. Psychol.*, 1931, 6, 157-168.—The term *unconscious* is relatively meaningless, due to the wide divergence of phenomena to which it is assigned. In present-day psychological parlance, it is synonymous with inanimate, sub-cerebral activity, habit, amnesia, repressed processes, increased synaptic resistance, incapacity, inexperience, ignorance, etc. By the term *unconscious*, psychologists should mean only those latent processes which are definitely opposed to manifest contents of consciousness; unconsciousness should not mean a level of consciousness. The levels of mental activity may be represented, on the basis of the ability to enter into consciousness, along a single line from focal-attentive consciousness to the absolute non-conscious levels, thus: (1) focal-attentive consciousness; (2) marginal attentive consciousness; (3) fore-conscious; (4) primary non-conscious level; (5) secondary non-conscious level; (6) absolute non-conscious level. *Unconscious* must not be taken to represent either a system of repressed wishes or a stratum of consciousness, the inaccessible or the unknown, but must be used as an attribute or characteristic of certain mental elements.—*L. A. Averill* (Worcester State Teachers College).

154. *Jung, C. G. Sigmund Freud in his historical setting.* *Character & Personality*, 1932, 1, 48-55.—A phenomenon like Freud was made necessary by the historical conditions of the time. Freud, with his theory of repressed sexuality, must be viewed in a retrospective way. He is a part of the "ressentiment of the incoming century against the nineteenth, with its illusions, its hypocrisy, its half-ignorance, its artificial, sapless religiosity, and lamentable taste." His method is not scientific; at best his theory is but a partial truth. The psychoanalytic theory prefers programmatic truth so as to reach a wider public.

But this is not because Freud prefers gossip and the scandalous to science, but because of the "compulsion of the *Zeitgeist* to expose the possible dark side of the human soul." Psychoanalysis emphasizes things most important to the neurotic of the twentieth century, and "destroys the false values in the neurotic personality by cauterizing away the rottenness of the dead nineteenth century." His explanations are faulty because neurosis is not specific to the Victorian era; sexual repressions do not constitute the only disturbance of personality, as evidenced by the success of Adlerian psychology. "Freud has not penetrated into the deeper layer of what is common to all humanity. He ought not to have done it, nor could he do it without being untrue to his cultural historical task. And this task he has fulfilled—a task enough to fill a whole life's work, and fully deserving the fame it has won."—*M. O. Wilson* (Oklahoma).

155. *Klages, L. The science of character.* (Trans. by W. H. Johnston.) Cambridge, Mass.: Sci-Art, 1932. Pp. 308. \$3.25.—A translation of *Grundlagen der Charakterkunde*. See III: 2257.—*R. R. Wiloughby* (Clark).

156. *Lewin, B. W. Anal erotism and the mechanism of undoing.* *Psychoanal. Quart.*, 1932, 1, 343-344.—This is a clinical communication dealing with the problem of self-castrative impulses which led to the dream of a lost penis, which on analysis proved to be the equating of penis with feces, thereby permitting castration with immediate replacement. This illustrates clearly the defense process of "undoing" and hints at a reason for anal regression in compulsion neuroses.—*M. H. Erickson* (Worcester State Hospital).

157. *Lindworsky, J. Methoden der Phantasieforschung.* (Methods of fantasy analysis.) *Abderhaldens Handb. d. biol. Arbeitsmethoden*, 1925, Abt. VI, B 1, 131-156.—Fantasy is defined as activity of consciousness directed upon objects (awareness of objects), an activity which is not directed by any goal idea and which results in relatively new combinations of images. This definition is not considered perfect, as it is based on two different principles, viz., inner experience and objective achievement. The author, however, believes that this is the best possible definition, since at present we do not know enough about the inner psychological conditions of fantasy activity. The author proceeds then to enumerate the conditions of fantasy, to describe the process of fantasy, and to discuss the methods which have been used and proposed to study both. The author has chiefly in mind the creative work of artists.—*Z. Piotrowski* (Columbia).

158. *Luria, A. B. The nature of human conflicts.* (Trans. by W. H. Gantt.) New York: Liveright, 1932. Pp. xvii + 431. \$4.00.—A number of researches and conclusions are presented bearing on the breakdown of motor behavior under affective stress; the method in all cases is that of controlled word association combined with registration of voluntary movements with the right hand and passive movements with the left. The principal situations

investigated were those of students awaiting eliminating examinations, criminals awaiting trial, subjects in whom a strongly affective situation had been implanted under hypnosis, neurotic patients, and children performing inhibitive and other tasks. Both affect and release from affect were studied. Clinical examination showed in all cases noteworthy differences between affective and normal states in respect to the neurodynamic behavior. There is a large amount of interpretive and theoretical material, and a concluding chapter of an experimental nature on the control of behavior.—*R. R. Willoughby (Clark)*.

159. McDougall, W. Of the words character and personality. *Character & Personality*, 1932, 1, 3-16.—*Charakter* (title of the German edition of this periodical) with German writers stands, as in biology, "for the sum total of those features, properties, or qualities of an individual, *species*, or *group*, which are peculiar to it and serve to distinguish it from other individuals, *species*, or *groups*." English writers, however, use *character* "in accordance with the special meaning of the word prevalent in common speech and literary usage," which is quite different from usage in biology. But this difference is very difficult to define. There is close agreement as to the way in which character (English sense) reveals itself in conduct, but as to what character means, few authors attempt to say. Associationism in England and Herbartian psychology in Germany no doubt have had a deterring effect in this direction, "for in both systems the mind was described as a mass . . . of ideas . . . which left no room for the distinction between character and intellect." Following lines proposed by Shand and Stout, McDougall (1908) developed a theory in which he proposed that character is the result of "an hierarchical organization of the sentiments under the dominance of some one master-sentiment, the dominant rôle being filled most commonly by the sentiment of self-regard or self-esteem." Character is to be regarded as a part rather than as the whole of personality, the other constituents being intellect, temperament, disposition and temper, each representing many independent variables.—*M. O. Wilson (Oklahoma)*.

160. Otto, R. Das Gefühl der Verratwörtlichkeit. (The feeling of treachery.) *Zsch. f. Religionspsychol.*, 1931, 4, 49-57.—*A. Römer (Gautschi bei Leipzig)*.

161. Pollak, F. Zum Problem des Masochismus. (Ein Beitrag zur Pathologie des seelischen Schmerzes.) (On the problem of masochism. A contribution to the pathology of mental pain.) *Zentbl. f. Psychotherap.*, 1932, 5, 385-398.—The case history of a masochistic patient is presented and a psychological interpretation offered. On the physiological side masochism is regarded as a developmental inhibition, closely allied to synesthesia.—*R. B. MacLeod (Cornell)*.

162. Prince, M., & Prince, W. F. Die Spaltung der Persönlichkeit. (Dissociation of personality.) Stuttgart: Kohlhammer, 1932. Pp. xvi+271. M. 16.00.—*R. R. Willoughby (Clark)*.

163. Röheim, G. Telepathy in a dream. *Psychoanal. Quart.*, 1932, 1, 277-291.—A 26-year-old girl developed a combined depressed and hysterical reaction in consequence of a love affair with a man who was sadistic and perverted in his sexual activity. Obsessive delusional ideas developed about the rest of her family masturbating, and she had dreams of which the latent content was coitus with her father, and these dreams were followed by conscious fantasies of the same. Analysis recalled a primal scene and revealed that she had introjected her parents in the act of coitus because of her removal from the scene at the time. Because of this deprivation she must now submit to all mistreatments by her lover. Second, she recalled her hunger and submission occasioned by her mother's insufficient milk. She reacted to these two deprivations by becoming depressed. During the course of the analysis she dreamed of having dreamed the same things as had the analyst, hence a telepathic dream. Analysis suggested definite relationship between this "telepathic experience" and the primal scene wherein the language spoken, that of sexual excitement, is universally understood, and analysis suggests an interaction between preconscious systems at the occurrence of the cathexis of an unconscious content. She also experienced visions of horrible faces and similar things, all threatening an attack. She developed ideas of magic powers—turning her upper lip inward would compel any man she desired to think of her. Analysis of these things suggested that hostile supernatural beings are parental representatives in the primal scene, which may be the origin of totem ancestors. Likewise magic appeared to be a substitutive gratification (onanism) of the child in the primal scene situation.—*M. H. Erickson (Worcester State Hospital)*.

164. Röheim, G. Die Psychoanalyse primitiver Kulturen. (Psychoanalysis of primitive cultures.) *Imago*, 1932, 18, 297-563; also *Int. J. Psychoanal.*, 1932, 13, 224.—See VI: 3154.—*D. Feigenbaum (New York City)*.

165. Römer, A. Täuschungsmöglichkeiten auf dem Gebiete der Parapsychologie. (The possibilities of deception in the realm of parapsychology.) *Zsch. f. Religionspsychol.*, 1931, 4, 64-71.—*A. Römer (Gautschi bei Leipzig)*.

166. Salter, Mrs. W. H. The history of George Vallantine. *Proc. Soc. Psych. Res.*, 1932, 40, 389-410.—Vallantine is held by many to be a remarkable example of "direct voice" mediumship. Investigations of his sittings, however, beginning with 1923, have revealed many suspicious circumstances and much actual trickery.—*W. S. Taylor (Smith)*.

167. Schertel, E. Der erotische Komplex. (The erotic complex.) Berlin: Pergamon-Verl., 1932. Pp. 96. M. 10.00.—*R. R. Willoughby (Clark)*.

168. Schmiedeberg, M. Psychoanalytisches zur Menstruation. (Menstruation from a psychoanalytical viewpoint.) *Zsch. f. psychoanal. Päd.*, 1931, 5, 190-202.—Part I is concerned with the attitude of primitive peoples toward menstruation, which ex-

hibits itself in a double way: prohibition of coitus during menstruation, and the peculiar menstruation rites. The author succeeds in demonstrating far-reaching agreements between the ideas of primitive peoples about menstruation and the medieval beliefs concerning witchcraft. The unconscious attitude is the same in both instances—viz., the fantasy of the castrating sadistic woman. A series of interesting analogies is explained by the power of incest fantasies and the guilt feeling arising from them, which is experienced as danger from the outside and warded off in various ways. Part II takes up the influence of menstruation on women, and particularly on young girls. Menstruation is typically considered as the consequence and proof of sexual activities, as a punishment for masturbation, or, in connection with the sadistic interpretation of coitus, as punishment for aggressive hate-tendencies against the parents. In the last section, the question is opened up: how can the difficulties for growing girls in connection with menstruation be removed? Explanation alone accomplishes nothing. In fact, its indirect effect is that it is interpreted as a proof of love and confidence and a permission for intellectual interest in sexual matters. Pointing out that it is the common fate prevents, on the one hand, inferiority feelings in regard to the girl's own person; on the other hand, the tenderness which meets the increased need for love refutes the fancied danger. These effects, however, are seen mostly in non-neurotic girls, and hence those who are approachable through explanation. There are others whom one gives in vain opportunities to ask questions about menstruation. These cases require psychoanalysis.—*M. E. Morse* (Hyattsville, Md.).

169. Sharpe, E. Ueber Sublimierung und Wahn-bildung. (Sublimation and the formation of delusions.) *Int. Zsch. f. Psychoanal.*, 1931, 17, 379-391.—The same infantile conflicts as those which cause delusions to originate under the influence of the super-ego may be sublimated in artistic activity. In sublimation the projections of the delusion appear as detached from the ego, as existing in reality. In his works the artist sublimates his aggressions against his parents on the basis of primitive identification, the phylogenetic prototype of which is cannibalism. In artistic creation, a segment of the magical mastery of the objects incorporated becomes a reality welcome to the ego. The first cultural sublimations of primitive man arise in the overcoming of the problems of nourishment and death. Interest in the historical disciplines, which re-animate the dead, follows the same mechanism of sublimation.—*S. Bernfeld* (Berlin).

170. Slutsky, A. Interpretation of a resistance; the analytic treatment as a neurotic defense. *Psychoanal. Quart.*, 1932, 1, 345-348.—This is a clinical communication discussing resistance developing during analysis which utilized the analysis itself as a neurotic defense and a justification of the continuance of the original reason for analysis, thus making

of the analysis a protective ceremonial for the neurosis.—*M. H. Erickson* (Worcester State Hospital).

171. Spadolini, N. Alcune considerazioni sulla fisiologia e fisiopatologia del sonno. Some considerations concerning the physiology and physiopathology of sleep.) *Atti XIX. Cong. Soc. freniatrica ital.*, 1931, 1198-1205.—Since pathological sleep appears as a result of dysfunction of the vegetative centers of the infundibulo-tuberane area or as a result of alterations of sensitive-sensorial relations in bilateral lesions of the optic thalami, we cannot assume a sleep center, but perhaps centers which regulate sleep.—*A. Angyal* (Turin).

172. Westerfield, J. B. The scientific dream book and dictionary of dream symbols. New York: Brewer, 1932. Pp. 330. \$2.50.—*R. R. Willoughby* (Clark).

173. White, H. D. J. An impediment in the voice; and a criticism of Adler's 'upward' philosophy. *Brit. J. Med. Psychol.*, 1932, 12, 65-73.—The case of a male singing teacher who preferred a high voice to a deep one. Contrary to the Adlerian doctrine, the way to health was to move, not upward, but downward (toward the bass).—*E. R. Hilgard* (Yale).

[See also abstracts 43, 108, 124, 189, 195, 230, 231, 234, 237, 242, 266, 268, 293, 306, 331, 336, 345.]

NERVOUS AND MENTAL DISORDERS

174. Allen, F. H. Creation and handling of resistance in clinical practice. *Amer. J. Orthopsychiat.*, 1932, 2, 268-278.—"When things are done which give a patient, adult or child, a justification in reality for a negative feeling directed toward the therapist, a barrier is introduced into treatment." The clinical interview should offer opportunity for the free expression of negative feelings as they are felt at the moment. Too often the therapist's checking of their expression causes the child or parent to transfer the antagonism from some other person or institution to therapist or clinic. A cooperative relationship in clinic practice should "not mean the dominance of one and the acceptance of this authority by the other." Objectives should not be so specific that they are directed toward changing definite lines of conduct and attitudes, particularly of a negative type. They should be, rather, those of establishing rapport, so that all feelings may be brought to the surface, and the leading of the individual to a better understanding of their meaning.—*A. G. Reynolds* (Winchester, Mass.).

175. Bartemeier, L. H. Some observations of convulsive disorders in children. *Amer. J. Orthopsychiat.*, 1932, 2, 260-267.—"Five years' clinical experience with 47 children suffering with convulsive disorders has brought the conviction that in those cases commonly regarded as idiopathic epilepsy, an analysis of the total personality constitutes the best method for understanding these processes and affords a more rational basis for therapy." The general plan of study evolved places particular emphasis on investigation of actual social situations in which con-

vulsions took place, organization of the family constellation, and (sometimes) effects of removing the child to a different environment. Conclusions as to the curability of convulsive disorders in children are not justified, but the conviction is held that treatment by "methods derived from analytic investigation is of very real value."—A. G. Reynolds (Winchester, Mass.).

176. Bose, G. *Psychology and psychiatry*. *Indian J. Psychol.*, October, 1931, 6, 143-146.—In general, the relationship between psychology and psychiatry is that between normal and abnormal psychology. Whereas in nature there is no sharp line of demarcation between the normal and the abnormal, the psychologists and psychiatrists have created such a division in the mental life. The war cases of shell-shock have been largely instrumental in bringing to the front the teachings of abnormal psychology. The traditional academic psychology has been barren in its practical applications and more or less static in its outlook. It has remained for the psychiatrists to emphasize the dynamic aspect of mental life. The study of abnormal psychology is proving extremely illuminating to normal psychology. The great defect of academic psychology, and some of the modern trends such as behaviorism, has been the objective outlook. The great value of introspection has not yet been truly appreciated. When the findings of normal and abnormal psychology are eventually correlated we shall be compelled to rewrite many of the current textbooks in psychology.—L. A. Averill (Worcester State Teachers College).

177. Bouman, L. *Paranoia*. (Paranoia.) *Psychiat. en neur. Bladen*, 1931, 35, H. 3.—Bouman gives a short historical review of the different conceptions of paranoia, followed by an exhaustive presentation of several cases previously reported by him and Westerp, in which he takes up the newer views, especially those of Gaupp, Kant, Kehrer, Kretschmer, and Lange. Psychological analysis alone, the mere explanation of the delusion from psychic motives, is insufficient to make the origin of a delusion intelligible. Bouman assumes rather a special disposition to delusion formation, a peculiar pathological personality, in which this abnormal manifestation is rooted in the lowest sphere, the deepest part of the psycho-vital layer, where changes in the sexual sphere also belong. At the basis of his theory lies the idea of organological division into 3 layers—a psycho-vital, a mental, and a personality layer. These are not sharply separated in consciousness and behavior, but represent tendencies in the living whole of the human being. The changes in paranoia spring chiefly from the personality layer, although slight changes in the first and second layers cannot be excluded. The connections of the manifold paranoid manifestations are best interpreted through the hypothesis of the three layers in the structure of the human psyche. Perhaps one will eventually come to the conclusion that no sharp separation exists between paranoia and paraphrenia, or even between paranoia

and the toxic and organic disturbances.—M. E. Morse (Hyattsville, Md.).

178. Bowman, K. M., & Bender, L. The treatment of involution melancholia with ovarian hormone. *Amer. J. Psychiat.*, 1932, 11, 867-893.—Of seven cases so treated, two made a good social recovery, three were unimproved, and two died (one of anemia and broncho-pneumonia and one of carcinoma of the uterus). "Our treatment, therefore, appears to have had little or no effect on the final outcome of these cases." The investigation included a careful study, before and after treatment, of patients' blood pressure, basal metabolism, blood chemistry, and galactose tolerance.—S. J. Beck (Boston Psychopathic Hospital).

179. Buscaino, V. M. *Syndromes encephalitiques et syndromes hystériques*. Pathogenese. (Encephalitic and hysteric syndromes. Pathogenesis.) *Riv. pat. nerv. e ment.*, 1932, 39, No. 1.—Report presented at the Congress of Neurology at Berne in 1931. From a study of oculo-epileptic postencephalitic crises, the author gathered facts which attest the great importance of mesencephalic centers and of basal ganglia for the genesis of the principal elements of hysterical crises. This conclusion is confirmed by the demonstration of objective disturbances of vegetative innervation in hysterics, independent of their psychic activity; by the demonstration in hysterics of disturbances of vegeto-emotive innervation with apyctic genesis; and by the fact that now it can be localized in the basal and mesencephalic centers.—G. C. Ferrari (Bologna).

180. Chuchmarev, S. I. *Podkorkovaya psikhofiziologiya*. (Subcortical psycho-physiology.) *Trudi Ukrainskogo psychonevrol. Instit.*, 1928, 7. Pp. 549.—This monograph contains an account of a rather simple experimental psychological study on cases suffering from the sequelae of epidemic encephalitis. It is equipped with quotations from work of other psychologists. There is a 163-page introduction, in which the author points out that the only method of science is the one of dialectical materialism which he employs. The author found out that the conditional reflexes were the same in the encephalitics as in the normal people. The motor reactions of the cases are described in great detail with introduction of the special apparatus for testing the motor responses of the patients. These show that not only the motor system but the whole organism is involved. The author stresses the intention tremor in cases of encephalitis in contrast with the absence of intention tremor in the cases of idiopathic Parkinsonism. A study of the emotional responses by means of string galvanometers shows feeble but definite emotional reactions in the encephalitics. The cardio-vascular response is unusually weak. The response in association tests showed a marked increase in reaction time in peasants as compared with encephalitics, who were brought up in the cities.—J. Kasanin (Howard, R. I.).

181. Ehrenberg, B. *Weltanschauung und Heilkunde*. (Philosophy and therapy.) *Arzt u. Seel-*

sorger, 1931, No. 24. Pp. 14.—According to the author, therapy can be understood only from an eschatological viewpoint.—A. Römer (Gautsach bei Leipzig).

182. Eliasberg, W. *Drei Grundtypen psychopathologischer Theorienbildung.* (Three fundamental types of psychopathological theory.) *Zsch. f. Psychol.*, 1932, 126, 38-50.—Three types of theory are presented historically and logically, and are critically evaluated. These are: (1) the "natural science-biological" theory, based on the hypothesis of continuity and generally involving the assumption of certain purposive trends; (2) the "dynamic" theory, emphasizing the primary importance of dynamic relationships within the immediately observable situation; and (3) the "phenomenological" theory, restricting itself to simple description. In each case the points of view of recent writers are discussed.—R. B. MacLeod (Cornell).

183. Farr, C. B., & Howe, R. L. The influence of religious ideas on the etiology, symptomatology, and prognosis of the psychoses. With special reference to social factors. *Amer. J. Psychiat.*, 1932, 11, 845-865.—All kinds of religious ideas manifested in 500 consecutive cases (342 men, 158 women) admitted to a mental hospital were studied. From the point of view of religious content the cases grouped into (1) those in which religious factors appeared to be the predisposing causes; (2) those with conflicts over moral or social aspects of religion, as prejudice, persecution, ostracism, divorce, education of children; (3) those in whom the manifestations were plainly symptomatic, i.e., ideas of sin, euphoria or hyperactivity, delusions, hallucinations, or paranoid trends, postural and catatonic expressions. Illustrative case histories are abstracted. Although admitting more important etiological factors than religious stress, the writers "are convinced that in at least 7% of unselected mental cases, as represented by our material, religion is an important factor in the initiation of the psychosis." Comment is offered on some observed differences in manifestations among Protestants, Catholics and Jews.—S. J. Beck (Boston Psychopathic Hospital).

184. Freeman, W. Biometrical studies in psychiatry. VII. Tuberculosis, syphilis and cancer. *Human Biol.*, 1932, 4, 208-238.—These diseases, which are important factors in the high death rate among psychotic populations, may be recognized by systematic studies of the inmates, and the first two may be treated more or less successfully. The data of this study come from the necropsy reports and show the different distributions of the diseases. The comparative incidence of active tuberculosis in per mille is as follows: schizoid 317, epileptoid 60, cycloid 24, paranoid 20; for syphilis, epileptoid 455, cycloid 435, schizoid 218, paranoid 134; for carcinoma and other malignant tumors, paranoid 136, cycloid 112, schizoid 43, and epileptoid 10. This type of distribution may aid in diagnosis and prognosis and is believed to rest on fundamental biological reaction patterns whose psychological correlates are recog-

nized by the psychiatrist, rather than some inherent incompatibility in the chemical and microbial agents.—O. W. Richards (Yale).

185. Göts, W. *Arbeiten zur Frage des angeborenen Schwachsinn.* II. (Studies on the problem of congenital hypophrenia. II.) *Arch. f. Psychiat. u. Nervenkr.*, 1929, 88, 251-264.—The author examined from the point of view of eidetic ability 100 feeble-minded children from the children's department of the Stadtroda asylum in Thuringia (58 boys and 42 girls ranging from 11 to 15 years of age). He used red, blue, and yellow circles and squares and pictures taken from the *Münchener Bilderbogen*. His results were as follows: the children were often able to see the complementary colors when the geometric figures were used, though this was seldom the case for pictures of scenes; the simpler the picture was, however, the more apt the child was to see the complementary effects; very rarely was a scene enlarged upon; and marked individual differences were found as regards the duration of these images and the method of their disappearance.—A. B. Hunter (Clark).

186. Herzberg, A. *Dominanzerscheinungen im normalen und abnormalen Seelenleben.* (Dominance phenomena in normal and abnormal mental life.) *Dtsch. med. Woch.*, 1931, 21, 877-879.—Following Ukhomski, the writer speaks of a function standing in readiness as a "dominant." Animal experiments indicate that the presence of a dominant in the central nervous system weakens or eliminates the ordinary effects of electrical stimulation of the cortex at the time, and that the effect corresponding to the dominant appears instead. The writer extends the category of "dominance phenomena" to human emotion, action, speech and sensation. The effect of dominance phenomena increases as thought systems become more affectively colored. The most extreme cases are found in paranoia. Since dominance phenomena occur in both physiological and psychological phenomena, they provide evidence of the homogeneity of the two fields.—C. W. Fox (Rochester).

187. Hinrichsen, O. *Ein Fall von Anstalts- bzw. "Trotz"-Psychose.* (A case of an institutional psychosis or "obstinacy" psychosis.) *Schweiz. Arch. f. Neur. u. Psychiat.*, 1931, 27, 278-285.—The patient came to the institution with the delusion that she should be a nurse or a physician's secretary there. Although she has little talent for these occupations, the longer she remains the closer her "connection" with the institution becomes. The writer concludes that the patient is psychotic, although her disorder does not fall under any of the ordinary diagnostic schemata.—C. W. Fox (Rochester).

188. Hirschfeld, B. [Ed.] *Jahresbericht Neurologie und Psychiatrie.* Jg. 14. (Annual report on neurology and psychiatry. Vol. 14.) Berlin: Springer, 1932. Pp. xii + 574. M. 79.00.—R. R. Willoughby (Clark).

189. Holstijn, J. W. W. *Zur Psychoanalyse der Paranoiker.* (Psychoanalysis of paranoics.) *Psy-*

- chiat. en neur. Bladen*, 1931, 35, 351-412.—This is a comprehensive review of the discoveries made through psychoanalyses of paranoid patients. The results up to the present time are as follows: The paranoid delusion is an attempt to ward off or to overcome a homosexual trend. The homosexuality may be evident in the symptoms and behavior, or it may be demonstrated only as the hidden content of the delusions, which often at first sight appear senseless. Both analysts themselves and investigators who have a similar viewpoint have emphasized observations of this kind, e.g., the frequency of fancied persecutions by persons of the same sex, and heterosexual impotence. Under the conditions of the psychosis, there is a change in the heterosexual proportion in the direction of homosexuality, especially the latent form. This shift does not usually arise from a definite happening, as an external influence; but it can also be a cause of the psychosis in other ways, e.g., a change of the libido constellation arising from intoxication. This intrapsychic biological discord causes the delusion, but Holstijn agrees with Freud in considering the delusion as an attempt to heal. To ward off a libido situation which is unendurable to the personality, contact with reality is given up. Introversion of the libido leads to a narcissistic inundation which is the psychotic process. Delusion formation is already a reconstruction, an attempt to return to the outside world. Delusions of grandeur represent an effort to overcome the narcissism. Holstijn discusses also other peculiarities: "right" and "left" in delusions (male and female); references to changed anatomy (especially of the endocrine organs); the meaning of defense and displacement (substitution of heterosexuality for homosexuality as an attempt at deliverance); the pregenital libido in delusions, especially oral eroticism (eating and being eaten); and hate-components in the genesis of delusions. In his therapeutic conclusions, the author says that delusions should not be contradicted, as thereby one does not touch the underlying conflict and on the contrary, endangers the healing process. The difficulty of treatment lies in the resistance, which is based on hate and bound up with a narcissism fixed by fear of castration.—*M. E. Morse* (Hyattsville, Md.).
190. **Israell, N.** The psychopathology of time. *Psychol. Rev.*, 1932, 39, 486-491.—A brief survey of contributions to the psychopathology of time by Janet, Minkowski, Straus, Gebattel and Fischer; followed by suggestions for research in social psychology into the various attitudes and reactions with reference to time, a tentative list of ten of which attitudes is contributed.—*A. G. Bills* (Chicago).
191. **Janet, P.** Les sentiments dans le délire de persécution. III. Essai d'interprétation des sentiments d'emprise. (Feelings in the delusion of persecution. III. Interpretive essay on feelings of confinement.) *J. de psychol.*, 1932, 29, 401-460.—A detailed discussion of such aspects of the persecutory delusion as feelings of imposition, substitution, presence of another, duality, transitivity, etc.—*N. L. Munn* (Pittsburgh).
192. **Kaufmann, M. R.** Some clinical data on ideas of reference. *Psychoanal. Quart.*, 1932, 1, 265-276.—This article analyzes the development of psychotic ideas of reference and influence in a female patient as originating in childish fantasies concerning the possession of a penis, a subsequent identification with both parents, and a still later projection of the related conflicts and the fantasied phallus in the guise of delusions and ideas of reference.—*M. H. Erickson* (Worcester State Hospital).
193. **Knowles, L.** Weird and comic experiences with the insane; true experiences of an attendant. Highland, Calif.: Harlem Press, 1932. Pp. 193. \$1.00.—*R. R. Willoughby* (Clark).
194. **Kogerer, H.** Ueber die Psychogenese des schizophrenen Misstrauens. (On the psychogenesis of schizophrenia distrust.) *Zsch. f. d. ges. Neur.*, 1931, 5, 778-798.—In the psychotherapy of schizophrenia the reconstruction of the confidence of the patient is of great significance.—*C. W. Fox* (Rochester).
195. **Manzoni, B.** Alcune obbiezioni alle dottrine di Kretschmer. (Some objections to Kretschmer's doctrine.) *Atti XIX. Cong. Soc. freniat. ital.*, 1931, 1240-1244.—The writer criticizes Kretschmer's view of cyclothymes and schizophrenes, according to which they would be nothing more than exaggerations of two normal types of temperament.—*A. Angyal* (Turin).
196. **McConnell, J. W.** Nursing in mental diseases. Philadelphia: Davis, 1932. Pp. 153. \$1.50.—This book of fourteen chapters is a series of lectures on the peculiar problems of nursing in the more common neurological diseases. The first four chapters give a concise account of the general information required, and the remaining chapters deal with the essentials of nursing care in common neurological diseases, with a final brief discussion of hysteria, neurasthenia, and psychasthenia. Twenty-four illustrations are given.—*M. H. Erickson* (Worcester State Hospital).
197. **Moersch, F. P.** Psychiatry in medicine. *Amer. J. Psychiat.*, 1932, 11, 831-843.—The fundamental facts of personality need to be taught medical students in the early years of their training, since these facts are applicable to all patients and not only to a few psychotic ones. Some psychiatric problem is involved in about 40% of the average clinical material, and in about 85% of psychiatric patients an associated problem of organic disease is present.—*S. J. Beck* (Boston Psychopathic Hospital).
198. **Moreau, M.** Syndrome transitoire de dépossession chez un tabo-paralytique après traitement par le Dmelcos. (Transitory syndrome of deposesession in a tabo-parietic patient following treatment with Dmelcos.) *J. de neur. et de psychiat.*, 1931, 31, 664-667.—The detailed history of a 39-year-old patient with general paresis who on pyretic therapy with Dmelcos showed a paranoid delusion similar to

those observed after malarial treatment. The clinical picture was characterized by psychomotor hallucinations, hypermnestic phenomena and bizarre motor fantasies. The coexistence in this patient of three mental automatisms leads the author to speak of a syndrome of "depression."—*H. Sys* (New York City).

199. Murphy, M. The incidence of feeble-mindedness among cases examined in the psychological clinic of the University of Pennsylvania. *Psychol. Clin.*, 1932, 21, 49-54.—Of the children examined at the psychological clinic of the University of Pennsylvania from 1912 to 1931 a total of 2,036, or 29%, were diagnosed as feeble-minded. Of these 154, or 7.5%, were of the Mongolian type. In general there has been a decrease, especially in the last five years, in the incidence of feeble-mindedness among cases examined. This is probably to be explained by a change in orientation on the part of the public toward clinical psychology.—*J. T. Metcalf* (Vermont).

200. Pfennigsdorf, E. Die biblische Psychologie und die Seelsorge an den psychisch Kranken. (Biblical psychology and the spiritual ministry of the mentally ill.) *Geisteskampf d. Gegenwart*, 1930, 66, 401-411.—*A. Römer* (Gautschi bei Leipzig).

201. Poli, E. Il valore delle oscillazioni dell'equilibrio acido base per lo scoppio dell'accesso convulsivo. (Importance of oscillations of the acid-base equilibrium for the appearance of the convulsive paroxysm.) *Riv. pat. nerv. e ment.*, 1932 31, No. 1.—The author, after giving large quantities of bicarbonate of soda to epileptics and to normal individuals, observed oscillations of the acid-base equilibrium. He concludes that one cannot ascribe pathogenic importance to these oscillations, which occur in connection with the epileptic attack. They ought to be interpreted as a biochemical symptom which accompanies the crisis.—*G. C. Ferrari* (Bologna).

202. Popek, K. K otázce kapilární mikroskopie u slabomyslných. (On the question of capillaroscopy of oligophrenes.) *Rev. v neur. a psychiat.*, 1931, 28, 49-55.—The author has published in this journal during the last year a study in which he showed that there was no difference between the capillaries of normal infants and oligophrenes. In the present article the author makes a general criticism of Hoefner's conception of the development of capillaries and recognizes as proved only two deviations in development: the persistence of archicapillaries, and the development of the neurotic type.—*E. H. Kemp* (Clark).

203. Rapaport, S. Heilung einer Trigeminusneuralgie. (The cure of a case of trigeminal neuralgia.) *Psychoanal. Praxis*, 1931, 1, 205-210.—A married woman, who was an illegitimate child, had a strong father fixation. Certain oral components in her make-up were expressed in the neuralgia. After four months of active analysis (in Stekel's sense) the symptoms disappeared.—*C. W. Fox* (Rochester).

204. Rossi, P. Contribution à l'étude de la perméabilité des méninges. (Contribution to the study

of the permeability of the meninges.) *Riv. pat. nerv. e ment.*, 1932, 32, No. 1.—The author injected into the spinal columns of 4 general paralytics and 2 dementia praecox patients 1 cc. of malarial blood. In every one the infection developed as if the injection had been made under the skin. The experiment shows that: (1) the schizonts of living plasmodia can cross the hemato-encephalic barrier; (2) the malaria in these cases has the characteristics of that transmitted from man to man. Contra-indications were not observed. The possible reasons for preferring the method were not given.—*G. C. Ferrari* (Bologna).

205. Rüken, H. Zur Frage des Schicksals von Sozialneurotikern. (On the question of the destiny of social neurotics.) *Münch. med. Woch.*, 1931, 51, 2159-2160.—Of 61 hysterical miners, 22 received permanent pensions, 20 were able to resume their mining work, 8 undertook similar work, and 11 either remained without income or were lost sight of. The writer discusses some unfortunate methods used in the treatment of neurotics.—*C. W. Fox* (Rochester).

206. Saric, D. K otázce o zmene vegetativní formule v prubehu psychoneurose. (Concerning the question of the vegetative formula in the psychoneuroses.) *Rev. v neur. a psychiat.*, 1931, 28, 15-19.—In a patient who exhibited psychasthenic symptoms the author found hyper-irritability of the parasympathetic and orthosympathetic systems. After 18 months symptoms typical of hysteria have been observed in the same patient. Examination of the sympathetic system has revealed a hyper-excitability of the orthosympathetic which favors the conclusions of Sebek, who has regularly found an exaggeration of the solar reflex in hysteria. The author insists on the parallelism between the psychic symptoms and the vegetative formula in the matter of the psychoneuroses and explains this parallelism by Haskovec's concept of subcortical mentality.—*E. H. Kemp* (Clark).

207. Saunders, E. B. A study of depressions in late life with special reference to content. *Amer. J. Psychiat.*, 1932, 11, 925-954.—The expressed content was studied and is discussed at length in 300 patients with affective disorders, admitted to Sheppard and Enoch Pratt Hospital. The study concerned itself with content, indicated symptom formation and the course and development of the depressive episode.—*S. J. Beck* (Boston Psychopathic Hospital).

208. Schilder, P. Ueber Neurasthenie. (On neurasthenia.) *Int. Zsch. f. Psychoanal.*, 1931, 17, 368-378.—Schilder maintains, in opposition to Freud, that the real neuroses constitute a form of psychoneuroses, since in them the mental conflict determines the pathogenic effect of the exciting occasion. This statement is confirmed by the analysis of a 20-year-old neurasthenic with sexuo-hypochondriacal traits. The significance of the body schema in the formation of symptoms is particularly discussed.—*L. Bernfeld* (Berlin).

209. Schmidt, H. Medizinisch-psychologische Beobachtungen bei der Anstaltsbehandlung von

Arbeitslosen. (Medico-psychological observations concerning the treatment of the unemployed in institutions.) *Zentbl. f. Psychotherap.*, 1932, 5, 351-355. —Patients who doubt their own capacities should not come into an atmosphere of increased uncertainty. Exciting and discouraging reports from the outside world should be suppressed.—C. W. Fox (Rochester).

210. **Sosset, M.** *La synthèse mentale en psychopathologie. Contribution à l'étude de l'autoconduction.* (Mental synthesis in psychopathology. Contribution to the study of auto-conduction.) *J. de neur. et de psychiat.*, 1931, 31, 701-741; 753-807. —The author states that although the term "mental synthesis" is rather vague and inadequate, she will use it to denote the coordination of the psychic life and the well-balanced integration of the different factors of which it is composed. In discussing the various theories regarding mental synthesis the author rejects the earlier theories of associationism, which are based on definite anatomical localization or at least on the concept of strictly separated psychic elements. In 1911 Toulouse and Mignard introduced a classification of mental disorders according to the degree of defect of auto-conduction. The term "auto-conduction" is used to indicate "well-adapted mental activity." Mignard's ideas on "psychic unity" are discussed and there is a summary of the concepts of Von Monakow and Mourgue on the "biological conscience" or "syneidesis." The mental synthesis consists in the increasingly fine adaptation of individual tendencies to the environment. Different theories express this principle: "the adaptation to reality" (Bergson), "the function of the real" (Janet), "syntonia" (Bleuler), "the vital contact with reality" (Minkowski). The disintegration of the mental synthesis, the author believes, is due to a disturbance of auto-conduction which prevents the patient from adapting himself to his environment, although his mental faculties may preserve their integrity. On the basis of several case histories this disorder of auto-conduction is demonstrated. A brief description of the dissociation between intellectual and instinctive processes in schizophrenia is given, and the phenomena of automatism are discussed. The mechanisms that enter into mental synthesis are self-criticism and belief in reality on the one hand and the mechanism of auto-conduction on the other. The mechanism of auto-conduction shows many analogies with the psycho-physiological process of "attention." The author stresses the fact that the present thesis is merely a study of the formal features of auto-conduction, and that the psychic content of mental disorders or their analysis has not been touched upon. An extensive bibliography is given.—H. Sys (New York City).

211. **Speer, E.** *Psychotherapie an Manisch-Depressiven.* (Psychotherapy in manic-depressive cases.) *Ber. ü. d. VI. allg. ärztl. Kong. f. Psychotherap.*, 1931, 230-237. —The writer observed and treated 176 patients who had been diagnosed by other physicians as manic-depressives, cyclothymes, etc. No beneficial influence through psychotherapy

was revealed in the obviously manic-depressive cases. In fact, if sufficient contact is possible, analytical therapy may be harmful to the patient. In those cases permitting therapeutic penetration, it appears that neuroses rather than genuine circular disorders are involved. The writer shows the need of revising the concepts of manic-depressive disorder and cyclothymia.—C. W. Fox (Rochester).

212. **Stanotti, C.** *De la sclérose amyotrophique latérale.* (Concerning lateral amyotrophic sclerosis.) *Riv. pat. nerv. e ment.*, 1932, 39, No. 1.—Illustration of a case with a rising course; and a discussion of the problems which still exist on the subject.—G. C. Ferrari (Bologna).

213. **Stein, L.** *Zur Symptomwahl bei der assoziativen Aphasie.* (Choice of symptoms in associative aphasia.) *Wien. med. Woch.*, 1931, 81, 1596. —A case report of a stutterer who in the course of treatment lost his speech disturbance, but replaced it with a new symptom—air swallowing. Stein interprets both symptoms as anxiety manifestations, i.e., the effort to get as much air as possible, and stresses the insufficiency of purely symptomatic treatment and the necessity for deeper psychotherapy.—M. E. Morse (Catonsville, Md.).

214. **Stengel, E.** *Zur Kenntnis der Beziehungen zwischen Zwangsneurose und Paranoia.* (The relationships between obsessional neurosis and paranoia.) *Arch. f. Psychol.*, 1931, 95, 8-23. —The case of a newly married couple, in which the wife, who was the first to be sent to the clinic, showed the typical picture of an obsessional neurosis, and the husband, who, a few days after the patient's admission, attracted attention by his peculiar conduct, showed the typical picture of jealousy paranoia. The histories demonstrated that, although a predisposition was present in both cases, the diseases had been mutually provoked and aggravated to an unendurable degree. Analysis showed that the bond between the couple, which in spite of the opposition of other persons, had strengthened as their illnesses progressed, represented, among other factors, strivings against homosexual tendencies. The kind of mutual influence and provocation in this case shows fundamental similarities and relationships to the induced and reactive psychoses with a favorable prognosis (Stransky). An important condition of the bond and the mutual influence is the inner relationship of the obsessional neurotic and the paranoiac, determined by the similar structure of their instincts.—M. E. Morse (Catonsville, Md.).

215. **Stevenson, G. H., & Montgomery, B. E.** *Paranoid reaction occurring in women of middle age.* *Amer. J. Psychiat.*, 1932, 11, 911-923. —From a study of women patients of middle age coming within the authors' experience, they conclude that there appears to be a clinical sub-entity in the "reaction to environment" group of psychoses. The chief symptoms are delusions of persecution, without obvious personality or intellectual changes, becoming apparent in about the fifth or sixth decade of life.

The change is very gradual. A specific etiological factor in many of these cases is a real or imagined sinful act, which, however, is projected to another.—*S. J. Beck* (Boston Psychopathic Hospital).

216. *Stevenson, G. S.* [Ed.] *Directory of psychiatric clinics in the United States.* New York: Commonwealth Fund, 1932. Pp. 164.—This third edition of the *Directory of Psychiatric Clinics* (first edition in 1925, second in 1928) is a very complete list of the public clinics in the United States which have psychiatric service for children. A psychiatric clinic is defined as one which has a psychiatrist in attendance. The total number of clinics is 674, including some 50 clinics for adults exclusively and those neurological clinics which offer psychiatric service. The clinics are listed by states.—*G. de Montpelier* (Clark).

217. *Tilney, F.* A comparative sensory analysis of Helen Keller and Laura Bridgman. II. Its bearing on the further development of the human brain. *Arch. Neur. & Psychiat.*, 1929, 21, 1237-1260; also in *Laryngoscope*, 1929, 39, 343-378.—The author makes a comparative study of the sensory systems of these two remarkable women, who, despite their severe handicaps, achieved a place in life higher than many normal people. Miss Keller was examined by the author, whereas the findings in the case of Miss Bridgman were taken from the study by G. Stanley Hall. Both illustrate that the peripheral receptors of the general sensory apparatus do not exhibit any compensatory development in those deprived in infancy of the special senses of sight and hearing. However, the general intelligence level of these two women is above the normal. This is important, when it is considered that they depend on a single sensory area of the brain for their intellectual rating, namely the parietal lobe. All other sensory areas, save smell and taste as specified, are inactive. In the pathological examination of Miss Bridgman's brain, the primary receiving centers of the functions of hearing and sight showed little of their normal or proper development. The parietal lobe, however, was well developed. The average brain develops only a small part of its potential power. Critical observation and study of the human race must justify this low estimate. The differences in men do not depend on the differences in the fundamental pathways of the senses, but on the ability of the brain to elaborate the impressions received. The difference is probably expressed by the myelinization of association fibers, rather than an increase in cellular elements, since these are already determined in the fetal stage. The chief factor favoring the deposit of myelin seemed to be the functional rise of the several brain areas. In most individuals there is a dearth of associations connected with most of the factors of one experience, because insufficient time is allowed for the needed concentration on any object or situation. The higher faculties suffer in consequence, because the associational surplus from which they may draw their higher development is extremely meager. The case of Helen Keller demonstrates what a brain may do

under the influence of concentrated, systematic attention. Many observers are pessimistic and feel that man has reached his highest peak of intellectual development. The modern tendency to speed and lack of concentration may tend to prevent further utilization of potential mental capacity. However, consciousness of evolution among intelligent men and women may serve as a stimulus for directing their attention to the understanding of our own mechanisms and the improvement of their capacities. Another encouraging influence is the steady, progressive development from prehistoric types. The problem of making still better use of the brain can be solved only by the development of that comprehensive science which will eventually supply an adequate knowledge of all the mechanisms underlying the control of human behavior.—*W. R. Miller*.

218. *Tramer, M.* Die Entwicklungslinie eines psychotischen Kindes. (The lines of development of a psychotic child.) *Schweiz. Arch. f. Neur. u. Psychiat.*, 1931, 27, 383-392.—Tramer had the opportunity to study exhaustively, on the basis of exact daily memoranda and medical observations, the development of a psychosis in childhood, an infantile schizophrenia. A complete series of notes on physical growth, motor development, and intelligence permit an exact determination of the time when deviations from the normal appeared. The psychosis was manifested in the third year of life, when the speech level previously attained underwent a certain regression, which in the fourth year became a stationary condition. This report is only a summary of a larger and more extensive publication which will evaluate the material with special reference to psychological and psychiatric problems.—*M. E. Morse* (Catonsville, Md.).

219. *Trossarelli, A.* Contributo alla conoscenza della velocità di sedimentazione dei globuli rossi nelle malattie mentali. (Contribution to the knowledge of the speed of sedimentation of the red globules of the blood in mental diseases.) *Rass. stud. psychiat.*, 1932, 21, No. 2.—The author used the hirudin method in 110 insane people to measure the speed of sedimentation of the red globules. The results are the same as those obtained by other authors with different methods, and present variations independent of physiopathological factors. The author infers that the diagnostic value of the reaction is very limited.—*G. C. Ferrari* (Bologna).

220. *Zweig, H.* Die Psychotherapie in der tschechischen Literatur von 1920-1930. (Psychotherapy in the Czech literature of 1920-1930.) *Zentbl. f. Psychotherap.*, 1931, 5, 111-119.—Psychotherapy is the Cinderella of Czech medical literature. In Prague, the interest of medical teaching is confined almost exclusively to psychiatry and organic neurology. The universities of Brünn and Bratislava, revived since the War, have been unable to contribute notably to the literature of psychotherapy on account of the short period of their activity, although Brünn, immediately after its re-establishment, devoted some attention to the subject. Furthermore, a part of the

authors have published their articles in the foreign (especially the German) journals. Consequently, references to psychotherapy are limited mostly to scattered observations, included only for the sake of completeness, and scarcely the outgrowth of rich experience. Zweig reviews the 24 articles on psychotherapy which have appeared in Czech between 1920 and 1930. Among the topics considered are the general field and methods of psychotherapy; the qualifications of its practitioners; the only child, the orphan, and the illegitimate; traumatic neuroses; stuttering; enuresis; perversions and sexual neuroses; and psychoanalysis. The viewpoint of most of the authors is non-analytic. Janota recommends a limited analysis in combination with other forms of psychotherapy. Forster considers it indicated in gastric ulcer, alcoholism and other addictions, certain skin diseases, the psychogenic origin of which is demonstrated, and in cases of tuberculosis with psychic shock, and those who cannot adapt to the therapeutic regime. Uher comments on the suitability of blind persons for analysis. Stuchlik, in an evaluation of the various forms of psychotherapy, considers that the Dubois method is directed primarily to the intellect, and is therefore possible only with intellectually mature persons; also only in acute conditions, where the will-to-recover is retained, e.g., psychogenic disturbances accompanying somatic diseases. Suggestion and hypnosis are especially adapted to individuals in whom affectivity is accentuated. The ideal and only causal form of psychotherapy is psychoanalysis, under which Stuchlik includes every form of fundamental analysis of symptoms without regard to its theoretical basis. The important consideration in this method is not what the patient learns objectively, but the affective relationship between patient and physician. Even a false explanation, or an imputed cause of the trouble which later proves to be wrong, may be the starting point of a considerable improvement. The therapeutic results are usually permanent. Although normal schools cannot take over analysis in toto, teachers should understand the concept of the unconscious, in order to recognize neurotic children, to encourage sublimation, and to avoid building up complexes in the pupils. Adler's individual psychology is not mentioned by name in any of the articles, although closely related ideas are scattered through them. References given.—*M. E. Morse* (Catonville, Md.).

[See also abstracts 2, 94, 125, 130, 131, 132, 133, 138, 162, 169, 267, 273, 307, 322, 355.]

SOCIAL FUNCTIONS OF THE INDIVIDUAL

221. Anosow, J. Z. Tat und Täter. (Act and perpetrator.) *Monatssch. f. Krimpsychol. u. Strafrechtref.*, 1931, 22, 537-546.—The act itself should not be made the fundamental principle of criminal law. Systems of law have no eternal validity. Overvaluing of the act must vanish with the end of an antiquated form of criminal law no longer adapted to the social and scientific status of the times. "Absolute domination of the act itself, as in the time of

objective accountability, was curtailed when psychological ideas penetrated." The act as a principle of valuation continues to be defended only from a feeling of revenge and from liberalistic ideas concerning the protection of the person. The writer finds in the act a "good diagnostic means" for understanding the personality, but nothing more. He finds no objection to his view in the fact that it is questionable whether a comprehensive understanding of the personality of the culprit is possible at all; he insists that even the act itself is not accessible in its full extent to the magistrate's eye. "The problem is to find a cosmos of diversity for the world of human personalities, i.e., to solve the problem of types."—*W. Beck* (Leipzig).

222. Barker, H. F. The racial composition of the population of American cities. *Amer. Mercury*, 1932, 27, 205-208.—A statistical study, based on the names appearing in telephone directories, reveals the predominance in the cities of three great stocks, German, Irish, and Scandinavian. The growing importance of the immigration of 1840-1890 is clearly and significantly indicated.—*J. T. Metcalf* (Vermont).

223. Beeck, P. v. Der psychologische Gehalt in den Romanen Defoes. (The psychological ingredient in Defoe's novels.) *Quakenbrück: Kleinert*, 1931. Pp. 68.—By means of an individual consideration of the novels in their mental implications, the writer sets forth the significance of the psychological element for the content and technique of the various works. At the end a summary in cross-section of the psychological elements gives a systematic clarification of the general results. The writer seeks to demonstrate in particular the inhibition and repression of the psychological outlook by a moral and evaluating attitude arising, in accordance with literary tradition, from the didactic tendency of the novelist. It is shown how, in Defoe's case, a specifically puritanical type of educational tendency determines to the greatest extent the content and form of mental delineation (typical phases of religious development; significance of the Bible in missionary work; a fatalistic attitude toward events—appearing in addition to moral evaluation as a further inhibition of the psychological point of view; puritanical dialogue). Strong emphasis upon the influence of environment distinguishes Defoe's novels most strikingly from the tradition of the novel. It is expressed not in artistic, broad analysis of complex structures, but in an intensive, socially biased emphasis upon rectilinear development. The force of circumstances makes criminals of Defoe's characters. Their conversion comes only after the material basis for a virtuous life or a surer state of well-being has been provided. For Defoe, social reforms are the way toward elevated morals. In general, feelings of sympathy are foreign to Defoe's characters. Even the principal persons are coldly egotistical. Friendships are manifested only in long-suffering attempts at conversion. A tender attitude toward nature, home or country is lacking. In Defoe's novels love plays as secondary a rôle as in the "rogue story." Erotic love lies in

the picaresque sphere. It is noteworthy that Defoe presents emotional outbursts which, in spite of their violence, show little personal differentiation.—P. v. Beeck.

224. Beth, M. *Religiosität und Religion (mit Ueberblick über die religionspsychologische Forschung)*. (Religiosity and religion, with a survey on research of religious psychology.) *Theol. Blät.*, 1931, 10, 33-45.—A. Römer (Gautzsch bei Leipzig).

225. Bogen, H. *Grundlinien zu einer Sozialpsychologie des Arbeitslosen*. (Fundamental aspects of a social psychology of the unemployed.) *Psychotechn. Zsch.*, 1932, 7, 33-38.—It is impossible to speak of a social stratum or class of unemployed. Although from external appearances it may seem that the unemployed as a group are united by certain characteristics which are essential for "class" formation, a closer analysis reveals that the individuality of unemployed persons does not emerge in the mass of these people. There is a psychological separation which prevents a true group spirit; and this is due to the fact that these people come from widely separated social and cultural strata. This difference in background gives them varied and at times opposing points of views about unemployment, its problems and prevention, and thus group unity is prevented.—C. Burri (Chicago).

226. Bolley, A. *Die psychologischen Voraussetzungen für die Kinderseelsorge*. (The psychological hypotheses of spiritual ministry for children.) *Katechet. Blät.*, 1931, 32, 114-131.—A. Römer (Gautzsch bei Leipzig).

227. Brandstätter, H. *Ein Beitrag zur Strafvollzugsbeamtenfrage*. (A contribution to the question of officials in the infliction of punishment.) *Monatssch. f. Krimpsychol. u. Strafrechtsref.*, 1931, 22, 663-676.—After a critique of the earlier intimidating punishment, the writer starts with the view that in educative punishment every official having to deal with the prisoner is a subject for education, that particularly the inspectors must have participated in pedagogical responsibility and in the building up of the pedagogical atmosphere and must not function and be considered simply as guards. That presupposes a careful selection of suitable personalities and a basic educational program. The writer desires an educational institution with modern methods of instruction. As far as possible administrative officials should not participate in the educational work; they should be instructed only in the fundamentals of the nature and value of educative work in the prisons. Brandstätter assigns a limited share in the educational work to the physicians, clergymen, and teachers of the institution. A medical examination of the prisoner is essential for education, but the immediate value of the physician lies in the medical field. The influence of the clergyman is limited by his dogmatic world-view; his problem is ecclesiastical care of souls. The teacher in the institution has two important problems: instruction and library work. The particular problems of educative punishment require

also the chief educator. "Education of asocial men is a peculiar and difficult activity, requiring a corresponding personality with full capacity for work." (Such officials are found in Hamburg, Saxony and Thuringia.) These officials must have basic schooling and must be particularly qualified persons; in order to fulfill their tasks, they need extensive freedom. The writer emphasizes that it is a mistake to develop educative work in the prison merely on the basis of "experience" and "feeling in the fingertips"; in addition to these factors, personal qualifications and specific training must dominate this important work in social pedagogy.—W. Beck (Leipzig).

228. Brandstätter, H. *Die Beurteilung der Briefe Inhaftierter*. (The examination of the letters of prisoners.) *Monatssch. f. Krimpsychol. u. Strafrechtsref.*, 1932, 23, 52-54.—One of the purposes of censoring letters in prisons is that the letters may extend knowledge about the prisoner's personality. The writer indicates the following sources of error in the examination of the letters: the conscious intention of the prisoner to make a certain impression upon the censor; the varying degrees of skill in writing among the prisoners; the fact that the prisoner and the censor belong usually to different social strata; and the fact that the letters are often written in abnormal moods, falsifying the picture of the writer's personality.—W. Beck (Leipzig).

229. Burkersrode, J., & Burkhardt, F. *Die Lesbarkeit der Gross- und Kleinschreibung. Eine experimentelle Untersuchung*. (The legibility of capitalized and uncapitalized writing. An experimental study.) *Päd.-psychol. Arbeit*, 1932, 19, 3-50.—Recently there has been a lively discussion over a radical reform of German orthography, centering around the omission of capitalization. The arguments on both sides have, however, been mere opinions, as there are no experimental data on the subject. The authors' experiments were undertaken because capitalization is the most important problem in orthographical reform, as well as the part of the program which would be most likely to be put into effect. The subjects were school children of 12-13 years. Capitalized and uncapitalized word and text material, as nearly equivalent in value as possible, was presented in the tachistoscope and by other methods, and the results were compared qualitatively and quantitatively. The experiments are described in full and numerous graphs and a bibliography are given. The results proved that capitalization hinders the reading process. The reading of uncapitalized text is a continuous flow of simple reactions. The large and small alphabets act as inhibitors of each other. Capital initials fix the attention and prevent it from spreading over the entire word-picture. The reading of capitalized text is a repetition of complicated reactions. Other conclusions are that the "dominants" (tall letters, h, l, etc.), are important for word structure and legibility. They are less easily recognized than the short letters, and collections of them in a word are unfavorable. Spacing has in all cases a

favorable influence. Separated, uncapitalized words present the best conditions for legibility.—*M. E. Morse* (Hyattville, Md.).

230. Carroll, H. A. A preliminary report on a study of the relationship between ability in art and certain personality traits. *School & Soc.*, 1932, 36, 285-288.—Somewhat over 100 University of Minnesota students were given the Meier-Seashore and McAdorty art tests, the Bernreuter Personality Inventory, and the Bathurst Diagnostic Temperament Test. Since the scores on the art and temperament or personality tests correlated to a negligible degree, it is concluded that the study lends no support to the current dogma that talent in art tends to be associated with personality disorders.—*H. L. Koch* (Chicago).

231. Crux, J., & Haeger, F. Sympathie und Antipathie in ihren körperlich-seelischen Bindungen. (Sympathy and antipathy in physico-psychological relations.) *Zsch. f. päd. Psychol.*, 1930, 31, 444-451.—The authors share Fischer's opinion that sympathy is allied to the feeling of gratitude, which is felt, in the first place, for those who have aided us, and is then extended to those who resemble our benefactors. Common interest creates a feeling of sympathy between friends, and self-love arouses sympathy between individuals of the same psycho-physiological type. The authors close with a discussion of sympathetic relations between master and servant.—*A. B. Hunter* (Clark).

232. Davenport, E. L. The intelligence quotients of Mexican and non-Mexican siblings. *School & Soc.*, 1932, 36, 304-306.—210 pairs of Mexican and 62 pairs of non-Mexican siblings in the first three grades of the elementary school were given the Goodenough intelligence test, involving the drawing of a man. The correlation between the IQ's of the Mexican siblings was .25, while that between the non-Mexicans was .51. The IQ's of the older sibs in the Mexican pairs tended to be higher than those of the younger, whereas the reverse obtained for the non-Mexican group. Mexican siblings, moreover, who had had no school experience resembled each other more in IQ than did sibs one of whom had had school experience and the other not. The author believes these facts indicate that even the Goodenough test, which is essentially a non-language test, underestimates, when it is given at school entrance, the future abilities of the Mexican child.—*H. L. Koch* (Chicago).

233. Densmore, F. Yuman and Yaqui music. (Smithsonian Instit., Bur. Amer. Ethnol., Bull. 110.) Washington, D. C.: Gov't Printing Office, 1932. Pp. 234.—*R. R. Willoughby* (Clark).

234. Dietrich, G. Pneumatische Seelenführung im Verhältnis zu Suggestion und Psychoanalyse. (Spiritual guidance in relation to suggestion and psychoanalysis.) Gütersloh: Bertelsmann, 1931. Pp. 79. M. 1.80.—*A. Römer* (Gautschi bei Leipzig).

235. Driberg, J. H. At home with the savage. New York: Morrow, 1932. Pp. 277. \$3.50.—*R. R. Willoughby* (Clark).

236. Everett, M. S. The hygiene of marriage; a detailed consideration of sex and marriage. New York: Vanguard, 1932. Pp. 248. \$2.50.—*R. R. Willoughby* (Clark).

237. Friedlander, M. I. An art expert's observations on personality. *Character & Personality*, 1932, 1, 75-78.—The method of the medieval artist was that of the craftsman, and personality had to remain silent; but from the fifteenth century onward personality begins to speak aloud, although this is not to be taken as an indication that it speaks clearly. "Personality lives and changes, and its disposition is such that, while it is free to pursue one path, it can follow another in different circumstances." Therefore, despite the fact that the expert operates by measurement and observation, and art criticism is part of the science of man, nevertheless when the task of identifying a work of art becomes difficult, this science approaches fiction. The character of an artist can be apprehended only in a biographical sense, and his biography can be constructed only with the aid of psychological imagination, since the factual material is never adequate to complete a chain of causes and effects. The best method is to "construct a character indirectly and lay out a master's manifestations in chronological order, avoiding direct methods of characterization which might lead to the formation of a mask which will never wholly correspond to the fluid nature of an acting, suffering human being." By this means it is possible to establish connection between two apparently incompatible works of a master.—*M. O. Wilson* (Oklahoma).

238. Gents, W. Die "declaration of principles" in ihrer revidierten Fassung vom 14. October 1930. Ein Dokument zur Reform des Strafvollzuges. (The "declaration of principles" in its revised version of October 14, 1930. A document for the reform of punishment.) *Monatssch. f. Krimpsychol. u. Strafrechtsref.*, 1932, 23, 1-12.—The writer gives a complete German translation of the new edition of the "fundamental principles" passed as resolutions at the Congress of the American Prison Society in Louisville, Oct. 14, 1930. He considers that they constitute a significant document having value and validity for all civilized nations.—*W. Beck* (Leipzig).

239. Grassberger, R. Das Bewusstsein der Rechtssicherheit und sein Einfluss auf die Gestaltung der Kriminalität. (The consciousness of certainty of justice and its influence upon the formation of criminality.) *Monatssch. f. Krimpsychol. u. Strafrechtsref.*, 1932, 23, 65-79.—On the basis of statistical data, Grassberger finds that the influence of certainty of justice upon the criminality of a country is considerable but not uniform. When certainty of justice falls, the amount of theft, for example, increases; but the amount of fraud decreases, because in such times there is strong mutual distrust. "As a result of lively interactions between all social factors, the

same social phenomenon is often manifested in opposite directions in the various trends of criminality. . . . This also explains why the battle against crime requires a wide range of methods the systematic application of which makes high demands upon criminologists."—*W. Beck* (Leipzig).

240. Griffiths, D. C. *The psychology of literary appreciation*. Melbourne: Melbourne Univ. Press, 1932. Pp. 144. 4/—A thesis for the Master of Education degree at Melbourne, giving a thorough analysis of the psychological processes underlying "appreciation" in the mind of the reader. The educational viewpoint is maintained, and suggestions for class-room practice are made.—*J. O. Spence* (Clark).

241. Groenback, V. *Die Macht des Gedankens gegenüber der Tiefe des Erlebens*. (The power of thought vs. the depth of experience.) *Arch. f. Religionspsychol.*, 1930, 5, 63-90.—*A. Römer* (Gautschi bei Leipzig).

242. Gruhn, W. *Psychoanalyse und Seelsorge*. (Psychoanalysis and spiritual ministry.) *Arch. f. Religionspsychol.*, 1930, 5, 285-308.—*A. Römer* (Gautschi bei Leipzig).

243. Grünhut, L. *Eros und Agape. Eine metaphysisch-religionspsychologische Untersuchung*. (Eros and Agape. A metaphysical-religio-psychological investigation.) Leipzig: Hirschfeld, 1931. Pp. 242. M. 9.00.—*A. Römer* (Gautschi bei Leipzig).

244. Hapke, —, Gleispach, —, Exner, —, Aschaffenburg, —, Gentz, —, Bithorn, —, & Hentig, H. v. *Zur klinischen Methode im kriminalwissenschaftlichen Unterricht*. (The clinical method in criminological instruction.) *Monatssch. f. Krimpsychol. u. Strafrechtsref.*, 1931, 22, 604-628.—The writers present their views concerning the possibility of and justification for bringing convicts before students of jurisprudence to demonstrate problems in criminal psychology. Hapke finds this method objectionable; the others favor it. Hapke supports his conviction by the argument that he sees in such demonstration an injury to or an endangering of the personality of the prisoner and also an endangering of the educative goal of the punishment inflicted, since the prisoner would experience himself simply as an "object," his relationship to his environment would be disturbed, and his isolation from the surrounding world would again be emphasized. The other writers deny that this is a necessary consequence of the clinical method. They believe that such dangers may be entirely avoided and that under certain conditions a correctly managed demonstration may actually work toward the educative goal. Furthermore the value of this method for the development of juristic recruits is said to be incontestable.—*W. Beck* (Leipzig).

245. Hartmann, A. *Untersuchungen über metrisches Verhalten in musikalischen Interpretationsvarianten*. (Research upon the metrical procedure in variants of musical interpretation.) *Arch. f. d. ges. Psychol.*, 1932, 84, 103-192.—The reproduction of a piece of music depends upon many things. In

addition to the notation there are individual differences in players and differences in the same individual at different times, such as changes of disposition, changes in motor ability, etc. These differences have nothing to do with the ambiguity of our present scheme of musical notation. The author reviews the various devices used in the field of the psychology of music. He uses the player piano for his work. By a study of the rolls of the player piano the author concludes that it is possible, by means of an exact procedure and calculations, to understand certain facts about musical interpretation. He studied such factors as time, accent, and touch; the first is the one stressed. He finds that there is greater uniformity of interpretation or reproduction in the lower notes than in the higher. He also finds that it appears that there are "touch" types in musicians. A bibliography of 51 titles is appended.—*F. J. Gaudet* (Dana).

246. Herskovits, M. J. *Population statistics in Dahomey*. *Human Biol.*, 1932, 4, 252-261.—In this kingdom in West Africa pebbles, representing the men, women and children, are placed in bags representing the different villages and are kept in the king's storehouse. This building has a room for the reign of each king. The methods used in counting the people are described but no numerical data are given.—*O. W. Richards* (Yale).

247. Holmes, S. J. *The changing effects of race competition*. *Science*, 1932, 75, 201-208.—Selective survival of groups as well as selective survival within groups must be considered in the study of man. The operation of selection within groups is conditioned largely by social forces. Conflict, as a factor in the evolution of the human species, has been replaced by more peaceful means with the growth of civilization. Following the white man's subjugation of other races in various parts of the globe there has been found a striking decrease in numbers and often a complete extinction of the primitive groups. The native Polynesian and Melanesian peoples, the Indians and other primitive groups have suffered from contacts with the white man. White domination, however, has accelerated race fusion and in many parts of the world has recently come to exert an important influence in promoting the increase of native peoples. The widespread depopulation "may be only a temporary phase characteristic of what we may call the exploring and settling stage in the development of interracial relationships." An increase in some of these primitive populations is found at present, and the causes may be traced to the changing relationships of native races to the dominant whites or other ruling peoples. The realization that the native populations are a valuable economic resource which it pays to conserve has cut down conflicts and increased wise administration. The adjustment of the natives to the economic and social organization of the more advanced races has resulted in symbiosis replacing hostility. Similar changes are occurring in South Africa, India, the Philippines and the West Indies. "Turning to our own race problem, we find

that the trend of our Negro population is in some respects similar to that of native peoples in other parts of the globe." "The student of the present evolution of our own species must concern himself not merely with the struggle between individuals or even neighboring groups, but with far reaching influences which tie together in bonds of common interest peoples of remote extraction. And along with these new relationships of interdependence are developing new kinds of rivalry whose outcome can be only dimly foreseen."—*N. Goldman* (Boston Psychopathic Hospital).

248. Jahn, E. *Psychologie und Seelsorge*. (Psychology and spiritual ministry.) *Monatssch. f. Pastoraltheol.*, 1931, 27, 217-229.—*A. Römer* (Gautschi bei Leipzig).

249. Karrer, O. *Seele der Frau. Ideale und Probleme der Frauenwelt*. (The mind of woman. Ideals and problems of the feminine world.) Munich: Verl. "Ars sacra," 1932. Pp. 220. M. 4.80.—*R. R. Willoughby* (Clark).

250. Kiser, C. V. *Sea island to city*. New York: Columbia Univ. Press, 1932. Pp. 272. \$3.50.—This is the fourth volume to appear under the project for the study of negro migration sponsored by the Social Science Research Council and the Columbia University Council for Research in the Social Sciences. The method is that of the personal interview, and the subjects about 500 migrants from St. Helena Island, South Carolina, to Harlem. The history and characteristics of both regions are delineated, the quantitative aspects of the movement described, and the reasons for change in individual cases sampled.—*R. R. Willoughby* (Clark).

251. Krämer, K. *Mord und Todesstrafe in Hessen 1817-1929*. (Murder and capital punishment in Hesse, 1817-1929.) *Monatssch. f. Krimpsychol. u. Strafrechtsref.*, 1932, 23, 129-176.—In this detailed monograph the writer comes to the conclusion that "certain interactions between clemency and criminality may of course be found, but that these results cannot be used by criminology either affirmatively or negatively to answer the question whether the death penalty is a suitable and necessary means of punishment." The study is to be regarded as a collection of material which will make possible an answer to that question only in connection with other studies.—*W. Beck* (Leipzig).

252. Kreuzberg, P. J. *Die religiöse Entwicklung der Landjugend*. (Religious development in rural children.) *Katechet. Blät.*, 1930, 31, 481-493.—*A. Römer* (Gautschi bei Leipzig).

253. Krogmann, W. *Motivanalyse*. (Analysis of a motif.) *Zsch. f. angew. Psychol.*, 1932, 42, 264-272.—The author reviews his own study, *The Fredrika Motif in Goethe's Works* (*Germanische Studien*, 1932), and incidentally refers to seven other similar studies. He is concerned with the observation that an important episode in a poet's life again and again influences his creative activity.—*E. F. Muenzinger* (Colorado).

254. Le Bon, G. *Psychologie der Massen*. (Psychology of crowds.) Leipzig: Kröner, 1932. Pp. xxiii+186. M. 16.00.—*R. R. Willoughby* (Clark).

255. Levy, D. M. *On the problem of delinquency*. *Amer. J. Orthopsychiat.*, 1932, 2, 197-211.—A discussion of three causal factors discernible in delinquent acts, represented by "(1) responses determined primarily by social forces, . . . (2) by personality traits, . . . (3) by mental conflict." Many delinquents are the result primarily of pathological milieu either from (a) direct instruction in delinquency; (b) constant exposure to criminal behavior; or (c) serious neglect in regard to ordinary sustenance and training. In cases of gross social pathology, it is argued that delinquency would ensue regardless of all other considerations. Delinquency may also be the expression of aggression, its probability of occurrence being in direct relation to environmental pathology. The third factor is primarily the neurotic mechanism, delinquency being an attempt to solve a psychic difficulty. All factors are present in every act, the stresses predominating in one of the three ways.—*A. G. Reynolds* (Winchester, Mass.).

256. Mead, M. *The changing culture of an Indian tribe*. New York: Columbia Univ. Press, 1932. Pp. xiv+313. \$4.50.—The author studied in the field the phenomena attending the contact of the Indian and white cultures as exemplified in a Plains tribe (anonymously presented). Part I is a consideration of the culture as a whole, including a historical sketch, a description of the physical features of the environment, and outlines of the economic, political, social, religious, and educational aspects of the situation. Part II is a consideration of woman's place in the culture, including long chapters on the household organization and on maladjustment, particularly delinquency. Part III presents the raw data on household organization, marital situation, delinquent case histories, and sample conversations. There is an introductory note on methodology and a foreword by Clark Wissler. The general conclusion is that in a period of cultural collapse such as is encountered here any element of either culture may be associated with any other in a quite meaningless manner, and that lacking the individual cultural standards which can come only with great sophistication, "the individual develops a formless uncoordinated character."—*R. R. Willoughby* (Clark).

257. Metelmann, C. *Zum Problem der Einteilung der Verbrecher nach psychologischen Gesichtspunkten*. (The problem of classifying criminals according to psychological points of view.) *Monatssch. f. Krimpsychol. u. Strafrechtsref.*, 1931, 22, 725-730.—Metelmann distinguishes the "act-type," as obtained in cultural sciences, from the "psycho-type" of criminal as made out in natural science. His problem is to find a standpoint from which the two may be brought together. He finds this in dependence upon environment, for here the culturalistic factor of the group and the natural-scientific factor of disposition and reactivity of the individual converge. "If Kronefeld tests the reactivity of mental

disposition to the various stimuli of the environment . . . , we may make the attempt to find a unitary stimulus effect and from this to draw inferences concerning the mental structure of the criminal. We get this unitary stimulus effect . . . if we test the attitude of the culprit toward the threat of punishment." The criminal may so react that (1) he seeks to avoid the punishment, or (2) seeks to conceal the deed, or (3) seeks to gloss over the punishable nature of his action. Flight is the most primitive reaction; in case (3) we have the method peculiar to the strong-willed and intelligent criminal. "The various types of criminals may be recognized again more or less distinctly in these different systems. The type of reactivity of the criminal to the total cultural external situation or to a definite social stimulus (threat of punishment) is thus always the point of view which permits us to set up psychological (i.e., natural-scientific) types and to evaluate these from the standpoint of cultural science.—W. Beck (Leipzig).

258. Meyer, E. *Nietzsches Wertphilosophie in ihrem strukturpsychologischen Zusammenhang.* (Nietzsche's value philosophy in its structural psychological relations.) Heidelberg: Winter, 1932. Pp. xii + 74.—R. R. Willoughby (Clark).

259. Miner, J. E. The churches and social well being. *Human Biol.*, 1932, 4, 421-428.—So far as these results go there is no indication of any effective contribution of the churches (Roman Catholic and Methodist and Baptist) to social well being as indicated by such variables as per capita wealth, literacy, health and sexual morality in the United States.—O. W. Richards (Yale).

260. Mursell, G. R. A revision of the Whittier Scale for Grading Juvenile Offenses. *J. Juv. Res.*, 1932, 16, 246-250.—The author's revision of the Whittier scale is characterized by a few new items, a renaming of some of the old items, slight changes in the relative scale position of certain offenses, and a method of scoring which takes into account recidivism.—H. L. Koch (Chicago).

261. Nice, M. M. An analysis of the conversation of children and adults. *Child Development*, 1932, 3, 240-246.—In order to study the character and composition of speech at different ages, the author recorded a thousand or more words in consecutive sentences of her children: one example at 30 months; two at 3 years and one at 4; two at 5, one at 8, and one at 10 years. In addition she collected two samples from adults. These conversations give examples of three sentence stages: the early sentence, average less than 3 words, at 30 months; the short sentence, 3 to 5 words, at three and four years; the established sentence, 6 to 9 words, for the older children and adults. In proportion to the total words spoken, nouns decrease with age, while verbs, pronouns, prepositions, and conjunctions increase. A consideration of the most used words shows that "the words of the baby are vivid and important ones. The little children show egotism, desire, and dependence on parents, but the older children ap-

proximate the comparatively colorless speech of the adults."—F. D. McTeer (Detroit City College).

262. Otto, R. *Das Schuldgefühl und seine Implikationen.* (The sense of sin and its implications.) *Zsch. f. Religionspsychol.*, 1931, 4, 1-19.—According to Otto this feeling refers to the sense of guilt, a unity which appears central in shame and remorse.—A. Römer (Gautzsch bei Leipzig).

263. Pitt-Rivers, G. Anthropological approach to ethnogenics. *Human Biol.*, 1932, 4, 239-251.—This lecture is a plea to use the information of anthropology in human biology, and gives a new name, ethnogenics, to this form of endeavor. "The term has no propagandist coloring, for the ethnogenist is concerned with the exact prognosis of race, population and culture change, and the etiology of that change in the past."—O. W. Richards (Yale).

264. Raitz von Frentz, E. *Drei Typen der Liebe.* (Three types of love.) *Scholastik*, 1931, 6, 1-41.—A. Römer (Gautzsch bei Leipzig).

265. Reynolds, B. C. An experiment in short-contact interviewing. *Smith Coll. Stud. Social Work*, 1932, 3, 3-107.—The author endeavored to discover the possibilities of a single interview and to find out whether short-contact experience could be given to students in some form. The study was carried out at the New York Children's Aid Society, interviewing those who desired either to place a child or to offer their homes for foster children. The writer concludes that short-contact interviewing is of the same essential quality as intensive case work. The first objective should be the securing of as great a degree of participation and responsibility on the part of the client as he is capable of at the time. This was found to prepare for a cooperative case-work relationship subsequently. The writer feels that students can be trained for short-contact interviewing if they develop a personal security. The body of the article is composed of numerous detailed histories illustrating different types of applicants.—H. Lange (New Hampshire State Hospital).

266. Römer, A. *Die Notwendigkeit einer religiösen Metamystik.* (The necessity of a religious metamystics.) *Neues Sächs. Kirchenbl.*, 1931, 38, 773-778.—It is proposed to collect in support of the religious psychological material as far as possible phenomena which are otherwise conditioned. Yet if such a line of separation is drawn for parapsychology, insofar as this knowledge is concerned, the voluntary trance should be considered as a second category, and in general this division can be maintained only so far as such parapsychological processes serve a determined religious purpose. For this reason it was decided to designate as "metamystic" all of those who believe they see something suspicious in occult phenomena. For the present this knowledge, which consists of a collection of various and sundry materials, shall be helpful to those interested in religious and occult phenomena.—A. Römer (Gautzsch bei Leipzig).

267. Ruland, L. Was gewinnt die Moralthologie aus der Verwertung der Ergebnisse der medizinischen Psychologie? (What does moral theology gain by an evaluation of the results of medical psychology?) *Ethik u. Leben*, 1931, 181-196.—A. Römer (Gautzsch bei Leipzig).

268. Schnyder, P. Le flagellantisme à travers les siècles. Etude historique et médicale. (Flagellatism throughout the centuries. Historical and medical study.) *Arch. de psychol.*, 1932, 23, 279-289.—The author divides his study according to the sources furnished by literature. (1) History gives the discipline and penitence practices of religious flagellation from the time of its introduction into monastic life to its systematization in the flagellant movement, which is characterized by the idea of penitence and which still has adherents. (2) Flagellatism as a literary and social subject or profane flagellation is represented by numerous works in anecdotal vein. They mark out the history of whipping since its utilization as an instrument of discipline and education, and after having been an instrument of penitence, until its degeneration into a means of sexual perversion and its use even in the present time. (3) The medical analysis of flagellatism by Freud, Stekel and Sadger has shown clearly its relations with sadism and masochism, with a foundation of psycho-sexual infantilism with leanings toward fetishism. But it is necessary to guard against exaggeration. Although the psychoanalytic theories clearly explain profane flagellation, religious flagellation, apart from the scandalous abuse which it encounters in every religion, is dependent on a feeling of contrition and penitence which we no longer recognize today and which, in consequence, we are incapable of understanding. The author gives as an illustration a personal observation of an individual who showed a phase of profane masochistic flagellation followed by a phase of religious flagellation characterized by penitence.—M. R. Lambercier (Geneva).

269. Seemann, M. [Sexual function and the voice.] *Časopis česk. lékař.*, 1930, 112-115.—(Czech.) The hormones influence the development, growth and activity of the upper respiratory tract and the organs of hearing. In two cases of acromegaly, the author observed a striking enlargement of the larynx. The changes in the larynx of both sexes at puberty are well known. After puberty also the voice changes, in women up to 30, in men to 36-38 years. The voice of castrated males is characteristic and resembles most closely that of boys. Woman's voice after castration becomes deeper and rougher. The changes with old age are similar, moving first in a heterosexual direction, and later approaching the monosexual type from which the voice developed in childhood. During menstruation, vocal disturbances, such as hoarseness and inability to take high notes, occur, due to increased vascularity of the laryngeal mucosa. In pregnancy a deepening of the voice has been observed. All these variations are produced through the vegetative nervous system. Seemann reports two cases of vocal neurosis on a sexual basis.

The first, a conservatory pupil, developed the feeling that her vocal disturbance was a consequence of illicit intercourse. The second patient was a 26-year-old man who was convinced that his impotence was due to masturbation, and interpreted the nervous falsetto which he developed as a eunuch's voice.—M. E. Morse (Catonsville, Md.).

270. Sommer, F., & Huber, K. Rechtspsychologie. (Legal psychology.) *Arch. u. d. Psychol. Instit. d. München*, 1931, 2.—A brief discussion of the psychological aspects of (and the rôle played by psychology in) jurisprudence, covering the legal system, legal history, and particular problems. With reference to legal psychology in its broader sense, the discussion touches on the auxiliary rôle in legal practice of criminal psychology, criminal psychopathology, penal psychology, and the psychology of testimony and examination, together with the importance of psychological expert opinion in individual cases.—T. J. Snee (Pennsylvania).

271. Stern, W. Religiosität als absolute Introzeption. (Religiosity as absolute introception.) *Zsch. f. Religionspsychol.*, 1931, 4, 57-60.—A. Römer (Gautzsch bei Leipzig).

272. Sydow, E. v. Kunst der Naturvölker. Afrika, Ozeanien, Indonesien. (Art of primitive peoples. Africa, Oceania, Indonesia.) Berlin: Cassirer, 1932. Pp. x+215. M. 15.00.—R. R. Willoughby (Clark).

273. Tramer, M. Ueber jugendliche psychopathische Delinquenten. (Youthful psychopathic delinquents.) *Monatssch. f. Krim.-psychol. u. Strafrechtsref.*, 1932, 23, 89-95.—The writer studied 133 youthful delinquents. Of these 45.8% were proved to be psychopaths in the narrower sense and 31.1% oligophrenes. On the basis of his findings, he agrees with the opinion of Gruhle and Homburger that "a general statement concerning psychopathy as a cause of delinquency cannot be made, and that each individual case shows a specific interweaving of dispositional and environmental factors." Also he finds confirmation for Birnbaum's statement concerning the "psychological colorlessness of delinquencies against property."—W. Beck (Leipzig).

274. Tumarkin, A. Aufgaben der Religionspsychologie. (Problems of religious psychology.) *Zsch. f. Religionspsychol.*, 1931, 4, 60-64.—A. Römer (Gautzsch bei Leipzig).

275. Vidler, A. B. Magic and religion. Milwaukee: Morehouse, 1932. Pp. 32. \$0.40.—An examination of the attack made by the Bishop of Birmingham (England) on Catholic sacramental doctrine. The author claims that this attack is based upon prejudice rather than reason, and that modern psychology supports this claim. The author's thesis is that religion is "an inborn instinct as well as an acquired sentiment," and that people who are irreligious either have had the instinct deflected into other channels or never had the instinct stirred into activity by the right kind of stimulus.—O. L. Harvey (Boston).

276. Vorwahl, H. Religion und Medizin. (Religion and medicine.) *Zsch. f. Religionspsychol.*, 1931, 4, 71-74.—A. Römer (Gautschi bei Leipzig).

277. Washburn, M. F. Ejective consciousness as a fundamental factor in social psychology. *Psychol. Rev.*, 1932, 39, 395-402.—Three classes of psychological influences are available for explaining the phenomena of social psychology—the social drives, the laws of learning, and the "ejective consciousness." The third influence has not been adequately emphasized. The presence of ejective consciousness in man explains the most striking differences between human and animal social behavior. It explains moral, social, and religious sentiments, degrees of suggestibility, language as opposed to involuntary emotional expression, the creative impulse in art, and the sense of the comic. A social psychology is inadequate which defines social behavior in man as reaction to the behavior of his fellow man, rather than to what he conceives to be the mental states of others.—A. G. Bills (Chicago).

278. Zarncke, L. Die Exerzitien spiritualia des Ignatius von Loyola in ihren geistesgeschichtlichen Zusammenhängen. (The spiritual exercises of Ignatius Loyola in their relationship to the history of the mind.) Leipzig: Heinsius, 1931. Pp. 180. M. 4.80.—A. Römer (Gautschi bei Leipzig).

[See also abstracts 91, 126, 143, 149, 200, 291, 298, 312, 315, 317, 324, 325, 326, 328, 331, 334, 335, 339, 345, 358.]

INDUSTRIAL AND PERSONNEL PROBLEMS

279. [Anon.] Der Psychotechniker als Gutachter bei Verkehrsunfällen. (The psychotechnician as evidential witness in automobile accidents.) *Indus. Psychotechn.*, 1932, 9, 191-192.—At a meeting of the department of legal and social medicine at the University of Berlin it was decided that in automobile accidents not only physicians but also psychotechnicians should be required to attend as evidential witnesses. As an argument in favor of such a procedure was given the fact that differences in personalities should be considered, and that three fundamental types of bad drivers should be recognized; the careless driver, the inattentive driver, and the incompetent driver.—C. Burri (Chicago).

280. Dériaz, W. Profil psychologique des redresseurs de barres. Étude d'exigences professionnelles. (Psychological profile of bar straighteners. Study of professional exigencies.) *Arch. de psychol.*, 1932, 23, 230-238.—The work of a straightener consists in straightening bars or plates of soft steel which are as much as 3 meters in length and some centimeters in thickness. This work is done with the hand after the manner of a balancer. A good straightener of bars is seldom encountered; there is, then, interest in studying the required aptitudes. The author was able to examine six straighteners who were recognized by their superiors and were more or less successful in their work. He gave them a group of psychotechnical tests ranging from sensory acuity

to Rorschach's test, including reaction time and several tests of intelligence (puzzles, etc.). Finally, the subjects were observed carefully during the examination and several traits of character noted. The conclusion is that among sensory and motor aptitudes only the sensitivity to weight correlates with the professional competence of the subjects. The work analysis shows effectively that the worker ought to feel constantly the way in which the bar resists his efforts, in order just to reach the limit of elasticity for attaining the straightening desired. This work is done only by small stages; this is the reason the individual of a low or average mental level, but having practical intelligence, will do better than another, provided that he be not also a suggestible or imaginative person.—M. R. Lambercier (Geneva).

281. Falk, E. Eine apparative Eignungsprüfung für Röntgenbetriebe. (An apparatus method for testing aptitude in roentgenology.) *Indus. Psychotechn.*, 1932, 9, 157-160.—The author describes an apparatus by means of which he can test a person's aptitude in performing all the essential movements and reactions necessary for the operation of an X-ray machine.—C. Burri (Chicago).

282. Giese, F. Über Berufserfahrungen mit Taubstummen. (Some professional experiences with deaf mutes.) *Psychotech. Zsch.*, 1932, 7, 39-44.—After having carefully studied the vocational efficiency of 70 deaf mutes, representing 30 different vocations, Giese concludes that the work produced by these people is just as good, or in some cases better, than that of normals; and that in cases where lack of efficiency occurs, the cause lies usually in a low degree of intelligence rather than in the sensory abnormality. The high degree of efficiency of these people may be explained by over-compensation for their organ deficiency.—C. Burri (Chicago).

283. Goldstein, N., & Putnoky, F. Zweckmässige Beleuchtung von Seiden- und Kunstseiden-Webstühlen. (Efficient illumination of looms for silk and artificial silk.) *Indus. Psychotechn.*, 1932, 9, 172-183.—Following a detailed account of the factors which need consideration in order to obtain satisfactory illumination for operating a loom, the author describes an improved lighting system which employs mirror reflection to produce a shadowless light over an entire loom. The installation of this new system of lighting in a weaving mill increased a weaver's output only slightly; however, the quality of his silk was greatly improved.—C. Burri (Chicago).

284. Greenwood, —. "Nerves" and public health. *Human Biol.*, 1932, 4, 155-178.—This Chadwick lecture first investigates the chance happening of accidents and then the personality factors of individuals who have more than the chance number of accidents. The importance of industrial psychology in hygiene and medicine is stressed.—O. W. Richards (Yale).

285. Hasdenteufel, I. E. Optimale Gestaltung der Anordnung von Bedienungselementen. (Optimum form and arrangement of operating elements.) *Indus.*

Indus. Psychotechn., 1932, 9, 149-157.—In connection with the development of a work bench, the author attempted to ascertain the relation of maximum ease and speed of use to the comparative size, height and position of all parts of the bench and in relation to the height of the worker. He attempts to put these measures into a mathematical equation so that, knowing the height of a person, one could easily solve for the values (height of work bench and position of implements) which produce optimum efficiency.—C. Burri (Chicago).

286. Heilandt, A. *Die Bewährung der Eignungsprüfung für angelernte Arbeiter in A-E-G Betrieben.* (The validity of aptitude testing for workers in A-E-G works.) *Psychotechn. Zsch.*, 1932, 7, 44-49.—In order to see how well a worker's efficiency and ability at a given job agrees with his standing on a series of aptitude tests, several groups of workers were chosen on a test basis, put through training, and after that placed on a permanent job. As soon as they had reached a permanent position their work was checked and followed up over several months. Each employee was then given an efficiency score, which was obtained by combining scores from several personality ratings and from a series of judgments of efficiency made by the foreman at definite intervals. This composite score was then compared with a composite score which had been obtained from the scores of the different aptitude tests. These scores agreed for the several groups of workers, in from 55 to 77% of the cases. Therefore the author concludes that the testing procedure, as it is used in this industry, gives valid results; that an individual's score may be relied upon as being indicative of his aptitude for this particular kind of work.—C. Burri (Chicago).

287. Immig, G. *Vierzehn Jahre Eignungsprüfung bei der Firma Carl Zeiss, Jena.* (Fourteen years of aptitude testing in the firm of Carl Zeiss, Jena.) *Indus. Psychotechn.*, 1932, 9, 161-171.—The experiences with aptitude testing are described and a comparison reported of the test results of 200 apprentices with their school marks and the ratings of their work. This was done in order to show that employment selection on the basis of aptitude testing is a valid and in the long run very economical procedure for both employees and employers. The comparison of the test results and follow-up ratings over the four years of apprenticeship showed very close agreement. The discrepancies between the test scores and ratings were never over one point, with an average of about .44 points for a group of about 65 persons. The differences between the test scores and the school marks ranged from 0 to 1.4 points.—C. Burri (Chicago).

288. Köhler, O. *Industrielle Unfallverhütung auf psychotechnischer Grundlage.* (Prevention of accidents in industry based on psychotechnical knowledge.) *Indus. Psychotechn.*, 1932, 9, 97-104.—On the basis of a study of the causes of accidents in a metal industry which employs 5000 workers, the author found that 15% of all accidents are due to defective machinery; 10% due to the occurrence of

unexpected incidents; 10% due to ignorance of the danger; 15% due to physiological defects of the worker; 10% due to low intelligence; and 30% due to carelessness. There was little relationship between the day of the week and the frequency of accidents; however, the frequency of accidents varies for different hours of the day. This variation seems to be due to the effect of the influence of rest pauses, etc. The author suggests a plan for training workers systematically for accident prevention. He also suggests that in order to motivate them to greater care, a bonus should be given for careful work.—C. Burri (Chicago).

289. Krieg, H. *Zur Psychologie des Hetzens und Bremsens.* (On the psychology of racing and restraining.) *Psychotechn. Zsch.*, 1932, 7, 59-70.—When do we obtain optimum efficiency—when a person works at his own rate, when he is pushed to the limit, or when he is restricted to a certain definite rate of work? This is the problem investigated by Krieg, who used a simple manual task consisting of transferring wooden blocks from one board to another in a certain definite arrangement. 14 subjects performed this task either at their own speed, with moderate or severe pushing, or with moderate or severe restriction. The pushing and restricting were accomplished by verbal instruction, by setting the required amount of work for a given period of time either below or above a subject's natural level of output. Three work periods were used. The first lasted ten minutes, the second from an hour to an hour and a half, and the third, eight hours. Much individual difference in the influence of racing and restraining was found. Most of the subjects were influenced only by one, either by racing or by restricting; only a few persons showed marked influences of both, while others were not affected at all. On the whole, it was found that the quantitative effect was only about 20 to 30% of the normal output. With racing the effect was one of increase, and with restricting, one of decrease of the rate of work. In an additional experiment, using an actual work situation where twelve subjects were required to bore holes in a wooden board for several periods of ten minutes, pushing the worker again increased his average output (about 13%) while it decreased his quality of work about 37%. Thus the increase in the amount of work performed is too small to make up for the loss in quality.—C. Burri (Chicago).

290. Kugelgen, W. *Eignungsprüfung für den kaufmännischen Büroangestellten im Kleinbetrieb.* (Aptitude tests for office employees in small commercial establishments.) *Psychotechn. Zsch.*, 1932, 7, 70-84.—This article gives the results of a job analysis of commercial vocations which was made by means of a questionnaire, and a description of a battery of eight tests for measuring commercial aptitude, especially that for office work. This test series consists of a composition test, a logical and a mechanical arithmetic test, a criticism and correction test, a handwriting interpretation test, a multiple movement and concentration test, and, finally, a test

for changeability of set. An office employee in commercial work must possess ability to perform arithmetic quickly and with high accuracy, to express himself well in writing, to evaluate and judge new situations, and to change "set" easily. He has to be able to think independently and to have logical insight into new situations and speed of decision. Personality characteristics to be recommended are conscientiousness, punctuality, orderliness, care, and honesty.—C. Burri (Chicago).

291. Kyneck, E. *Mängel bei der Erwerbslosen-siedlung.* (Deficiencies in unemployment settlements.) *Psychotechn. Zsch.*, 1932, 7, 38-39.—Unemployment settlements are merely a substitute and not a solution of the economic problem of unemployed workers.—C. Burri (Chicago).

292. Lubrich, W. *Experimentelle Untersuchungen zum Problem der sogenannten Schrecksekunde.* (Experimental research on the problem of fear reaction time.) *Arch. f. d. ges. Psychol.*, 1932, 84, 1-42.—In 1928 the Supreme Court of Germany recognized the part played by differences in reaction time in traffic accidents. The author performed the research described in this article to answer such questions as: (1) What influence does fright have on a customary form of activity? (2) Does the sudden and unexpected release of a stimulus usually bring about fear? (3) Does fear cause a lengthening of the reaction time? His reaction-time technique and equipment are described and illustrated both by drawings and photographs. The author concludes that when we are considering reaction time in relation to traffic accidents we should consider not only the factor of fear in lengthening the reaction time, but also such factors as the driver's attitude or mental set and his ability to change his mental attitude. The author studied to what extent practice can change reaction time. He recommends that psycho-technical examinations be used for the selection of auto drivers.—F. J. Gaudet (Dana).

293. Mayerhofer, G. *Untersuchungen über die Wirkung des Alkohols auf den Fahrzeugführer unter besonderer Berücksichtigung des Reaktions-verhaltens.* (Investigations of the effect of alcohol on truck drivers, with special emphasis on reaction behavior.) *Indus. Psychotechn.*, 1932, 9, 129-144.—What is the effect of alcohol on automobile drivers, and to what extent does a given amount of drink affect different people differently in their ability to make quick and correct reactions? These individual differences were studied by testing experimentally the differences in reaction time and errors of reaction of 20 men from 25 to 40 years of age, on a test car, after they had consumed various types and amounts of alcohol, as well as after no alcohol had been taken. The dose of alcohol was adjusted to the daily amount which each subject drank habitually. It was given in the form of 3½% beer, 8% wine, and 38% whisky. The tests were given twenty minutes after the drink. These consisted of simple foot reactions to a flashing light, choice reactions to five lights, and complex reactions (two kinds of foot and two hand

reactions) to two combinations of two lights. The effects of alcohol shown by most of the subjects were: increase in errors in choice and complex reactions; increase in reaction time; false judgment of their own speed, as well as of the speed of the reactions of others; increased effort in performing movements; decrease in errors in attention; loss of inhibitions, resulting in over-estimation of their own efficiency; tremor; and ataxia. Although the effect of alcohol on the efficiency of driving is in general a disturbing one, it must be noticed that a given amount of alcohol has various effects, depending upon the degree of alcohol tolerance a given subject possesses. A given dose of alcohol may cause no detrimental effects in one subject, while it may severely disturb another.—C. Burri (Chicago).

294. Muldo, F. *Über Sinnfälligkeit beim Einordnen von Werkzeugen.* (Perception in relation to the arrangement of tools.) *Indus. Psychotechn.*, 1932, 9, 144-149.—After testing several methods of arranging tools in a tool box, such as arranging them according to numbers, by a photographic pattern, by a plan of the box, by the name of the tools, or according to a sketch of the tools in the box, the author concludes that any kind of method which is based on perception is better than one which taxes a subject's memory.—C. Burri (Chicago).

295. Rovani, A. *Psicologia del volo.* (The psychology of aviation.) *Aeronautica*, 1931, 11, 336-338.—After considering the problems of a pilot, the writer examines, in the light of his own experiences and observations, those factors which may cause physical and mental fatigue. At the end he mentions those modes of acting which are necessary for good achievement in this occupation.—A. Angyal (Turin).

296. Schiller, P. v. *Das Ranschburgsche Phänomen und dessen Einfluss auf das Erkennen von Kraftfahrzeugkennzeichen.* (The Ranschburg phenomenon and its influence on recognition of automobile licenses.) *Psychotechn. Zsch.*, 1932, 7, 49-59.—According to the author the Ranschburg phenomenon is an error "tendency." If in a series of letters or digits there exist two similar or identical elements they are easily confused, overlooked or incorrectly perceived. In instantaneous perception of a series of four to six digits or letters of which two are identical, these identical elements are not recognized if there are no differentiating clues such as color difference or proper spatial separation. This phenomenon frequently becomes a disturbing factor in daily situations where quick and accurate perception of numbers is required. For example, the policeman must notice numbers and signs of moving cars. This task is very much more difficult if a number is so arranged that the Ranschburg phenomenon is present than if the same number is put in differentiating colors or spatial arrangement so that the phenomenon does not exist. This has been shown experimentally. Small wagons with number plates are made to run on an artificial and automatic traffic field. Ten subjects occupied themselves with reading. At different intervals they received a signal to look up from their

books and quickly notice the number of the passing experimental ear. The results from this procedure showed that about three out of twenty perceptions were wrong when the number consisted of heterogeneous elements, while if numbers were presented with two identical digits, put either beside each other at the end of a series, or in the middle and separated by another digit, then, in about 16 out of the 20 trials, the numbers were incorrectly perceived. On the other hand, if the homogeneous digits were differentiated by making them of unlike colors, or by putting one at the beginning and the other at the end of a series, then no more errors occurred than when all the digits were heterogeneous. The author suggests that in practice combinations of numbers which produce the Ranschburg phenomenon should be avoided.—C. Burri (Chicago).

297. Schmidt, H. Zur Orientierung in Grossgebäuden. (Orientation in large buildings.) *Indus. Psychotechn.*, 1932, 9, 184-191.—By means of a systematic study the author tested the usefulness of an orientation guide for a large public building, finding that the facility of orientation was greatly improvable by changing the method of instruction and of numbering the doors.—C. Burri (Chicago).

298. Selz, O. Arbeiten des Instituts für Psychologie und Pädagogik der Handelshochschule Mannheim. (Studies from the Institute for Psychology and Pedagogy of the School of Commerce of Mannheim.) *Zsch. f. angew. Psychol.*, 1932, 42, 259-263.—An excerpt from the annual report by the director of the institute. It is largely a review of two studies, Clara Bott's *Analysis of Salesladies* and J. Bahle's *Psychology of Musical Creation*. It also contains a list of all the studies from the institute between 1924 and 1931.—K. F. Muenzinger (Colorado).

299. Sgarbi, E. Importanza dell' esame psicologico nella scelta dei piloti. (Importance of the psychological test in the selection of pilots.) *Aeronautica*, 1931, 11, 259-293.—A. Angyal (Turin).

300. Shartle, C. L. A selection test for electrical troublemen. *Person. J.*, 1932, 11, 177-183.—The job of electrical troublemen in the Milwaukee Electric Railway and Light Company was studied in view of developing a more satisfactory method of selecting men for this hazardous occupation. Since applicants must have previous electrical experience, it was necessary to devise trade as well as aptitude tests. A battery of eight tests was checked against foremen's ratings and accident records, with the result that six were retained in a final set-up for employment purposes. The final battery yielded a validity coefficient of .67 with foreman's ratings. Retest after a year and a half correlated .91 with original scores.—(Courtesy *Person. J.*).

301. Vernon, H. M., & Warner, C. G. Objective and subjective tests for noise. *Person. J.*, 1932, 11, 141-149.—Experiments demonstrated that objective tests for the effect of noise, such as arithmetic tests and the determination of energy expenditure, were

of very little value; but subjective tests gave striking results. The degree of subjective disturbance experienced was noted down when the subjects (1) read a psychology book, (2) performed an arithmetic test, and (3) performed a purely manual test. Observations in factories and offices showed that intermittent noises caused a good deal of disturbance during test (1), a slight amount during test (2), and very little during test (3).—(Courtesy *Person. J.*).

[See also abstracts 47, 358, 375.]

CHILDHOOD AND ADOLESCENCE

302. [Anon.] Negative Jugendkunde. (Negative adolescent psychology.) *Vjesh. f. Jugendk.*, 1932, 2, 179-181.—The necessity of adolescent psychology can be shown not only by the good results from its application, but also by the bad results of its absence. Bad treatment from the parents becomes the child's standard for his own behavior in later years. Several illustrative cases are described.—M. Lee (Chicago).

303. Arlitt, A. H. The parents' bookshelf; a list of books for study groups. (Rev. ed.) Chicago: Amer. Library Assn., 1932. Pp. 8. \$0.05.—R. R. Willoughby (Clark).

304. Blume, E. Die Organisierung des Kindes. (The child organization.) *Vjesh. f. Jugendk.*, 1932, 2, 172-174.—Organized groups of children are a necessary development of the present-day social and economic situation, and have increased in strength while the educational force of the family, school, state, and church has declined. The tendency is now not to mold children in any preconceived direction, but to let them take their own part early in matters of business, society, state, and politics. The author raises the question whether this is wholly desirable, but considers the emphasis that most groups place on health and simple living to be very timely.—M. Lee (Chicago).

305. Boas, F. Studies in growth. *Human Biol.*, 1932, 4, 307-350.—Increase of stature was studied with reference to maturity and racial group with data mainly from Horace Mann School pupils who were followed to maturity. The earlier the period of maximum rate of growth the shorter is the period of growth, and the interval between the time of maximum growth rate and menstruation is greater. Hebrew children average taller in the early years and shorter as they become older. Acceleration or retardation within the same social group has apparently no influence on adult stature. The growth curve is intimately related to the moment of maximum growth rate, and less so to the date of first menstruation. Individuals who have the same stature at an early age are, as adults, shorter the earlier the time of maximum growth rate. Different genetic lines of the Horace Mann School population have a standard variability of $\pm .64$ years for the time of maximum rate of growth.—O. W. Richards (Yale).

306. Bornstein, B. Die Phobie eines zweieinhalbjährigen Kindes. (The phobia of a child two

and a half years old.) *Int. Zsch. f. Psychoanal.*, 1931, 17, 344-367.—A girl two and a half years old refuses, with manifestations of fear, to lie in bed, and demands that her mother remain with her. Even after administration of soporifics, she falls asleep only in a sitting position. After a treatment of two months (30 hours of analysis), it appeared that the child was suffering from conflicts which had arisen from pleasure in soiling herself. When she had been trained in cleanliness, she knew that such behavior displeased her mother and that she would be left alone. The symptom had the meaning of forbearance from defecating in bed and thus avoiding loss of love. Her pleasure in soiling herself had been acutely increased as a result of sexually exciting and distressing observations; these had impressed upon the child the fact of anatomical sexual differences. Five months of catamnesia indicates complete lack of the symptoms.—*L. Bernfeld* (Berlin).

307. Broadwin, I. T. A contribution to the study of truancy. *Amer. J. Orthopsychiat.*, 1932, 2, 253-259.—A discussion of truancy which "occurs in a child who is suffering from a deep-seated neurosis of the obsessional type or displays a neurotic character of the obsessional type." The absences are consistent, the parent always knowing where the child is. Two cases are given. Infantile love of mother is the basic determination. Truancy "fulfilled many more demands than mere absence from irksome school work. To dwell alone on the lack of satisfaction in school work is to miss the entire point of the patient's difficulties." Such cases are most effectively approached through handling of the unconscious psychic life of the patient, and in connection with the evolution of love and hate instincts.—*A. G. Reynolds* (Winchester, Mass.).

308. Canivet, N. Enquête sur l'initiation sexuelle. (A study of sexual enlightenment.) *Arch. de psychol.*, 1932, 23, 239-278.—What rôle does the method of sexual enlightenment play in the ideas of the child, his reactions, and his relations with his parents? The author analyzed successively the 12 answers to a questionnaire which she sent to 97 men and 153 women between the ages of 16 and 74 years who had expressed a willingness to cooperate in the study. The questionnaire dwelt on the age at which the rôles of mother and father had been learned, the person who revealed each of these facts, the memory retained of this enlightenment, whether the subject had preferred that it come from the parents, how maternity was considered after this revelation, the resulting feelings toward man and woman respectively, the nature of the problems in the sexual field, etc. The majority of the children were given the information between the ages of 8 and 12 years, usually by comrades. This enlightenment by comrades regularly leaves a disagreeable memory, while that made by the parents has an opposite effect, depending, however, on the relations between parents and children. More important than the age at or the origin of enlightenment are its quality and timeliness; these factors condition feelings about ma-

ternity and feelings in connection with members of the opposite sex (desire, respect, envy, timidity, disgust, contempt, ambivalence, etc.). A good enlightenment, through the confidence which it establishes with the parents, can make the adolescent less alone, a thing particularly important at a time when he needs strength for serious problems in the sexual field. This also permits him to choose the persons and circumstances capable of exercising a good influence on him. The author indicates how difficulties relative to the first enlightenment can be resolved, at what age this enlightenment should be made, which of the parents is the better qualified, the influence of mixed instruction and of lying by the parents. She remarks that there emerged from her study an almost tragic impression of disorder and abandon which can come from the omission of a frank sexual education, conforming to the realities demanded at the age when curiosity is awakened, an education which should be commenced by the parents and completed by the school.—*M. R. Lambercier* (Geneva).

309. Cavan, R. S., & Cavan, J. T. Building a girl's personality: a social psychology of later girlhood. New York: Abingdon Press, 1932. Pp. 175. \$1.50.—The purpose of the book was to assemble scattered information with reference to girls and "to present it and the experiences of the writers in non-technical language." It is intended especially for ministers, religious educators, teachers, and those in charge of clubs. After defining youth, the authors discuss the factors determining personality and emphasize the fact of individual differences. They then speak of the girl in her home, her job, her friends, her opportunities for growth, her emotions, and her need for a life philosophy. There is a list of questions at the close of each chapter, as well as a group of references.—*M. G. Willoughby* (Clark).

310. Charvát, O. [Punishment in the home training of the child.] *Vychov. listy*, 1931, 213-216.—Punishment is a parental duty if the healthy moral development of the child requires it. Corporal punishment should, however, be used only when all other measures have failed. Punishment must be adjusted to the age and temperament of the child and the seriousness of the fault, which is to be measured by the responsibility, not by the damage caused. In accordance with educational principles, punishment should be omitted entirely if the child honorably admits his fault and shows sincere repentance. Often, however, this is only a diplomatic trick to avoid punishment. The correct attitude of the parent or teacher after administering punishment is cool reserve. Undesirable habits and anomalies, such as bed-wetting or nail-biting, should not be punished but put under treatment. Punishment should always be educative, i.e., it should be just and not humiliating or dispiriting.—*M. E. Morse* (Catonsville, Md.).

311. Charvát, O. [The only child.] *Vychov. listy*, 1930, 265-267.—The greatest fault in the handling of the only child is that he is too much brought up, thus checking the development of personal independence. This dependence and inaptitude are

usually combined with signs of precocity and grown-up cleverness, since these children are accustomed to associating with adults. On account of his coddling, the only child often becomes a hypochondriac and egoist. In a situation similar to that of the only child are first-born children who remain for a long time without brothers or sisters, and youngest children who appear after a long interval.—*M. E. Morse* (Catonsville, Md.).

312. Chase, V. A. Educational achievement of delinquent boys. *J. Juv. Res.*, 1932, 16, 189-192.—165 boys committed to the Whittier State School for delinquency were given the New Stanford Achievement Test. The average mental age of the group fell .54 years below the average chronological age, whereas the average educational age was 1.8 years less than the former. In geography the group had made the most normal progress, while in arithmetic fundamentals they were most retarded. Their performance in reading was relatively better than it was in most subjects.—*H. L. Koch* (Chicago).

313. Conrad, E. Eine Lernstörung. (A learning difficulty.) *Vjsch. f. Jugendk.*, 1932, 2, 174-179.—A 15½-year-old Latin scholar was unable to learn an assigned word list and was also subject to moments of excitement in which he could not master any task. Analysis revealed association between the words and unsolved conflicts based on early experiences, and envy of an older brother. The author pleads for the short time and attention necessary to unravel such cases and so make possible a normal development.—*M. Lee* (Chicago).

314. Cunningham, K. S., Williams, J. F., Guttridge, M. V., Springthorpe, G., & Gunn, J. A. The young child. Melbourne: Melbourne Univ. Press, 1932. Pp. 64. 2/-.—A series of five lectures on child management arranged by the Victorian Council for Mental Hygiene. The topics dealt with are as follows: *Why Children are Naughty; The Mischief of Fear; Should Children Obey?; The Child in a Temper; The Growth of Personality.*—*J. C. Spence* (Clark).

315. Day, E. J. The development of language in twins. I. A comparison of twins and single children. *Child Development*, 1932, 3, 179-199.—The subjects of this experiment were 80 pairs of twins (20 pairs at each of four age levels, 2, 3, 4 and 5 years); in this group there were equal numbers of boys and girls, and the occupational status of the parents was proportionately representative of Minneapolis as a whole. The investigator visited these children and recorded 50 consecutive responses made by each child while he played with a group of toys which she presented to stimulate speech. "These data were then analyzed in four different ways: by mean length of response; according to the Piaget functional analysis; by the grammatical construction of the sentence; and word analysis by parts of speech." The data so obtained were compared with similar records taken by another investigator (McCarthy) in a study of 140 children (ages 15 to 54

months) who were not twins. "As compared to single children twins are retarded in language development, as measured by each of the methods of analysis used. This language retardation increases with age and is most clearly shown in the comparison of the findings of mean length of response." However, "the twins in this study were found to be approximately ten points below the IQ of the slightly superior group of singletons with whom they were compared." Bibliography of 20 titles is included.—*F. D. McTeer* (Detroit City College).

316. Eigler, P. The effect of unusual stimulation on motor coordination in children. *Child Development*, 1932, 3, 207-229.—"The problem of learning to make rhythmic responses was studied with such instrumental control that evidence was obtained on the various stages in the learning process." The apparatus used consisted of a red light flashing intermittently at a rate of once every two seconds; the duration of the flash was two-thirds of a second. The response to this stimulus was the depression of a reaction key; if the key was pressed when the light was on, a bell rang; while if the key was pressed when the light was off, the subject received a slight shock (2300 volts, 0.2 milliamperes) in the reacting finger. A kymographic record was made of both the stimuli and the reactions. The experiment proper consisted of 10 trials, each composed of 45 successive stimuli, the first 15 of which were without shock, while the remaining 30 were with shock. The subjects were 20 adults and 22 children, ages 2 to 6 years. For the children the 10 trials were given on separate days. The shock was so disturbing that 12 of the children failed to react to more than half the stimuli; for them shock was discontinued after 2 or 3 trials. Responses were analyzed into 5 categories: synchronizations, asynchronizations, anticipations, lags, and omissions. "Learning, more synchronizations, occurred for all groups. For those who received the shock throughout, the learning was more rapid and continued to a higher level than for those who did not." Omissions and asynchronizations were eliminated earlier than anticipations, and these were eliminated earlier than lags. "The adults began at a higher level of correct responses than did the children, and increased in the number of correct responses at a faster rate." To a certain extent a similar differentiation was found between older and younger children. A bibliography of 39 titles is included.—*F. D. McTeer* (Detroit City College).

317. Francke, H. Sündenbewusstsein bei Kindern. (Consciousness of sin in children.) *Neue Erziehung*, 1930, 12, 851-855.—*A. Römer* (Gautschi bei Leipzig).

318. Heering, G. A. A study of thumb sucking in infants from two to seventeen weeks of age. *Child Development*, 1932, 3, 273-277.—354 observations of 30 seconds each were made of 25 infants, 2 to 17 weeks of age. "Eleven of the babies sucked their thumbs. All but one of them sucked at more than one weekly age level; thus the sucking can be considered habitual for the early period of infancy cov-

ered in this study. There was a marked preference for the right thumb."—*F. D. McTeer* (Detroit City College).

319. *Hollingworth, L. Heimweh.* (Homesickness.) *Vjsch. f. Jugendk.*, 1932, 2, 185-187.—Two cases of homesickness are described. One is that of a 19-year-old boy whose mental state and consequent physical symptoms had necessitated his immediate return from school and college away from home. The history revealed excessive petting by his mother, upon whom he still felt a childish dependence. The recommendation was work of a manual sort away from home for a summer to build up his independence and remove attention from himself, and then a co-educational college. The other case is that of a 17-year-old girl who for 16 years had slept in the same room, for 12 in the same bed, with her mother. Two attempts to attend a boarding school produced various functional symptoms and such extreme depression that suicide seemed to her the only escape. Treatment consisted in gradual accustoming to new places by visits of increasing length.—*M. Lea* (Chicago).

320. *Holmes, T. C. Comprehension of some sizes, shapes, and positions by young children.* *Child Development*, 1932, 3, 269-273.—Two methods are suggested for studying the comprehension of sizes, shapes, and positions by kindergarten and nursery school children: (1) a game with geometrical forms to be identified by name, while the experimenter points simultaneously at one of the incorrect forms; (2) a simple story with special words or phrases to be dramatized by the child with a teddy bear or doll.—*F. D. McTeer* (Detroit City College).

321. *Hurlock, E. B., & Schwartz, R. Biographical records of memory in pre-school children.* *Child Development*, 1932, 3, 230-239.—A detailed review of published biographical records (36 in number) indicated that memory during the first year is very brief, up to 5 days, principally for persons and objects. During the second year the latency period is extended to 2 or 3 weeks. During the third year this is increased to several months; situations, colors, forms, and stories are now remembered. "Unusual events and things which are interesting to the child have a longer latency period than neutrally toned events."—*F. D. McTeer* (Detroit City College).

322. *Kasanin, J., & Vee, L. A study of the school adjustments of children who later in life became psychotic.* *Amer. J. Orthopsychiat.*, 1932, 2, 212-227.—A study of the history of 54 cases of mental disease. The average age of patients at hospitalization was 20 years. The average time elapsed since the patients were in school was 3 years, 8 months. One or more teachers of each patient were interviewed. The patients were classified from the findings into 5 groups: (1) 12 odd, queer, and peculiar; (2) 16 somewhat maladjusted and perhaps neurotic; (3) 5 average; (4) 6 unusually brilliant, ambitious and successful; (5) 15 extremely shy, backward and passive. Half the psychoses developed in the easily recognized groups (1) and (5) and might give ground

for early recognition and possible prevention with education of teachers and a psychiatric unit as an integral part of a school. Probably mental disease could not have been foreseen or anticipated in the other 50%.—*A. G. Reynolds* (Winchester, Mass.).

323. *Kawin, E. A preliminary report of a kindergarten guidance project in a public school system.* *Amer. J. Orthopsychiat.*, 1932, 2, 242-251.—Report of preliminary findings on 100 children studied by the clinic of the preschool department of the Illinois Institute for Juvenile Research. This clinic studies and seeks to help every child, instead of "problem" cases usually selected. Clinic-parent, clinic-teacher, and parent-teacher contacts are made. The "total constellation" of each child determines the amount of study given each case. 12% of the first hundred children seemed to need special clinic study and treatment.—*A. G. Reynolds* (Winchester, Mass.).

324. *Keilhacker, M. Die Entwicklung des Begriffs "gerecht" bei Kindern und Jugendlichen.* (The development of the concept of the "right" in children and adolescents.) *Zsch. f. päd. Psychol.*, 1931, 31, 544-558.—*A. Römer* (Gautzsch bei Leipzig).

325. *Koch, P. Kinderschrift und Charakter.* (Children's writing and character.) Iserlohn: Brause, 1932. Pp. 96. RM. 1.20.—This book attempts to show the significance of the graphological psychology of expression for our knowledge of the child's personality. The nature of graphology is developed and the most important objections to the scientific character of this discipline are reviewed. Then, by means of 32 half-page examples of the writing of children (boys and girls) from 6 to 15 years of age, the individual forms of children's writing are shown. These samples of writing are added in a separate appendix. The following long chapter on the expressive meaning of writing considers first the fundamental concepts of personality, character, temperament and intelligence, and then gives a description, constructed on the basis of Kretschmer's constitutional types, of the world-turned and the world-alienated (or self-turned) child and shows how the personality type of the child is expressed in his writing. There follows a schematic statement of the characterological interpretations of Meyer, Klages, Saudek and M. Becker; the graphical characteristics of the types of intelligence and of children's lies are considered particularly. In the last and practical part, the appended specimens of writing are considered; the author shows by graphological analyses of the writings of a boy and a girl how, in the words of Kroh at Tübingen, "the results of graphology may be made convincing even to the sceptic if analysis of writing, estimates by teachers, and self-estimates are brought together." The author does not over-emphasize the graphological method. He realizes that there is no infallible psycho-diagnostic method, and uses it to supplement the other methods of child psychology. Yet it becomes intelligible to the reader that an objective and critical application of the method of expression psychology is very in-

formative, especially for our knowledge of the emotional and volitional life of the child. References are made to German and foreign literature.—P. Koch.

326. Lechner, M. *Die Methoden der religions-psychologischen Jugendforschung.* (The methods of religio-psychological investigation of adolescence.) *Pharus*, 1931, 22, 161-174.—A. Römer (Gautzsch bei Leipzig).

327. Liefmann, E. *Volksschülerinnen, ihre geistigen und Körperlichen Leistungen und die Beziehung zur Konstitution.* (Girls in public school, their mental and physical performances and the relation to their constitution.) *Zsch. f. angew. Psychol.*, 1932, 42, 102-219.—This study is concerned with mental and physical measurements on 152 ten-year-old girls of the city of Freiburg i.Br. Their mental examination consisted of tests of general intelligence (opposites, arithmetic, completion, Bourdon test) and of tests of "practical" intelligence (Bogen's cage and Schulte's pearl board). The physiological examination consisted of motor ability tests, the usual physiological measurements, and a general medical examination. The results showed that the healthier child is generally the abler one. Using Kretschmer's index, 47% pure types were found; there was, however, no relation between these types and the outcome of the motor ability tests. 77 references.—K. F. Muensinger (Colorado).

328. Loch, M. *Über Eidetik und Kinderzeichnung.* (Concerning eidetic imagery and children's drawing.) *Arch. d. Psychol. Instit. d. München*, 1931, 2.—The article covers an elaborate and thorough investigation of the relation between eidetic endowment and drawing ability in children between the ages of 9 and 19. A detailed description and discussion of the tests used to separate the subjects (taken from drawing classes) into the non-eidetic and the eidetic groups, and to subdivide the latter according to the degree of eidetic imagery, is presented, together with an indication of the characteristics of the endowment. Two types of eidetic images are noted: those following the presentation of a stimulus, and those voluntarily aroused without preceding presentation. The drawing tests consisted of sketching the image projected upon the paper, of reproducing a drawing (presented and then withdrawn) of drawing from a living model and also from memory, of drawing a picture starting with a given figure, and finally of illustrating a poem. Interesting results were obtained. The direct use of the eidetic image is impossible with the greater number of the subjects and only under the most exacting conditions will the subjects attempt to use this method, which further gives a more primitive drawing than non-eidetic methods and invariably gives rise to exaggerations and errors in form. When, as is the usual case, the eidetic child draws non-eidetically, he is not to be distinguished from the non-eidetic subject. The eidetic endowment exercises no indirect influence upon drawing, nor is the eidetic individual specially talented for particular modes of drawing or for draw-

ing itself. That drawing groups contain an unusually high percentage of eidetic individuals is due not to a talent for drawing on the part of eidetics, but rather to the fact that those who draw have greater need and desire for practice in the arousal and perfection of the image. Through practice the imaginal ability of the individual is increased. A critical discussion of the theory of Jaensch and the Marburg school on eidetic imagery is given, particularly with respect to the rôle of the eidetic image in the genesis of consciousness.—T. J. Snee (Pennsylvania).

329. Lüneberg, T. *Symptome einer negativen und positiven Entwicklung beim Jugendlichen.* (Symptoms of a positive and negative development among adolescents.) *Arch. f. Religionspsychol.*, 1930, 5, 99-265.—A. Römer (Gautzsch bei Leipzig).

330. Lush, M., McBae, J., Lawton, J. T., Albiston, N. A., & Wrigley, L. J. *The growing child.* Melbourne: Melbourne Univ. Press, 1932. Pp. 72. 2/—A second series of lectures on child management, discussing the following topics: *The Child in the Family; The Child at School; The Child and the Community; The Importance of Habit; The Growth of Character.*—J. C. Spence (Clark).

331. Murray, M. E. *Validation of items of the psychoneurotic inventory.* *J. Juv. Res.*, 1932, 16, 213-230.—The purpose of the study was to investigate the possibilities and limitations of the questionnaire technique as applied to the detection of emotional maladjustment in adolescent boys. A questionnaire was constructed, using, in the main, items demonstrated in previous tests to be most valid. The selected statements were improved in the direction of brevity, clarity, and precision, and were viewed merely as expressive of attitudes or feelings rather than descriptive of objective conditions. The questionnaire of 114 items was given to three groups of boys ranging in age from 11 to 16 years—50 selected emotionally maladjusted boys, 277 non-delinquent control subjects, and 60 delinquent control subjects. The items, 46 in number, which showed the highest frequency ratios and the highest critical ratios between the experimental and control groups were then selected to form the final revised questionnaire. Since weighting the statements by the use of the Strong chart increased neither the reliability nor the validity of the instrument, weighted scores were discarded. The reliability of the questionnaire computed by the split-half Spearman-Brown technique was .83. Scores on the questionnaire yielded no significant correlations with age, grade, IQ, or rating of socioeconomic status according to the Sims scale.—H. L. Koch (Chicago).

332. Neugebauer, H. *Spiel und Phantasie in der früheren Kindheit meines Sohnes.* (Play and fantasy during the earlier childhood of my son.) *Zsch. f. angew. Psychol.*, 1932, 42, 220-258.—This is the last of a series of eleven reports on various phases of the childhood of the author's son.—K. F. Muensinger (Colorado).

333. Niemer, G. *Selbstbekenntnisse höherer Schüler in dichterischer Form.* (Self-revelation of high-school students in poetical form.) *Vjach. f. Jugendk.*, 1932, 2, 154-171.—There is a need for self-expression which drives youth today, as always, to poetry writing and keeping diaries. To show the type of poetry produced and the drives which underlie it material was assembled that had been written by students of pre-adolescent, adolescent and post-adolescent years. 25 examples are quoted which range from occasional prose or verse to true lyrics and reveal a great variety of theme, from school material and nature description to nameless longing, melancholy and despair.—M. Lee (Chicago).

334. Parker, H. T. *Defects of speech in school children.* Melbourne: Melbourne Univ. Press, 1932. Pp. 96. 4/-.—Following a general discussion of speech and its development, this report gives a detailed account of the various types of speech defect which were revealed by an extensive survey of over 30,000 children.—J. C. Spence (Clark).

335. Piaget, J. *The moral judgment of the child.* New York: Harcourt, Brace, 1932. Pp. ix + 418. \$3.75.—The study is based on the interrogatory method described in earlier works (*Language and Thought in the Child, Judgment and Reasoning in the Child, The Child's Conception of the World, The Child's Conception of Causality*). In the first chapter, the rules of a boys' game (marbles) and a girls' game (hide-and-seek) are investigated as to the manner in which they are practiced and thought of; it is found that there is an early stage in which rules are elaborated more or less individually and under the influence of the urge to repeat. In a second stage the actions of older children are imitated, in the belief that the rules are being observed, but the child really continues to play individually. In later stages the rules are both really observed and regarded as the product of mutual agreement. These stages are shown to depend upon the gradual disappearance of attitudes of complete submissiveness toward parents and seniors and the corresponding growth of mutual respect for comrades. Chapter II deals with children's judgments of the relative seriousness of offenses, and Chapter III with the ideas on punishment; in both these chapters the same growth of attitudes is shown. The last chapter is a more or less abstract discussion of the moral theories of Durkheim, Bovet, and other philosophers.—R. R. Willoughby (Clark).

336. Quayle, M. *As told by business girls.* New York: Woman's Press, 1932. Pp. 137. \$1.50.—From the written or verbal reports of 120 business girls from several different localities on their experiences in office, home and social life, grew this study of the personality problems of business girls. The first two chapters consider inferiority feelings, their possible causes, and ways of detecting and meeting them. In a discussion on total personality, importance is attached to the factors which "add to or detract from a girl's feeling of well-being and confidence," viz., physical condition, mental health,

etc. Techniques are suggested for discarding undesirable and acquiring new and desirable habits. There is a chapter on the influences determining vocational choice and suggestions as to a more rational choice. The need for recognizing fundamental drives is emphasized, together with the desirability of finding constructive outlets for these drives, either directly or through sublimation, and of finding constructive ways to handle the thwarting of these impulses. The last chapter considers attitudes which affect one's way of living. There is abundant illustrative material taken from the reports of the girls themselves; and a selected reading list of two pages.—M. G. Willoughby (Clark).

337. Sandek, R. *The years of puberty in a public school. Character & Personality*, 1932, 1, 17-34.—This study deals with the mental development of Harry, a boy of superior ability in the English public school system, based on an examination of 131 communications written between the years of 8½ and 15½. The author first presents data to show that there is little correlation between scholarship and calligraphy and drawings. Evidently other factors, as irritation, physical and mental overstrain, and neurotic disposition, cooperate in shaping the individual's script. The author finds nine "alarming features" in these writings up to the eleventh year, namely, marked ataxia and slight tremor; inconsistency in letter-form; anticipations; omissions; perseverations; substitutions; variability in shape, size, width and slant of letters; retracings; and useless words. (Some of these are found in the writings of sufferers from compulsory neuroses, hysteria and various psychoses in adults.) At no time has Harry's writing been so bad as at the eleventh year, yet neither is he naughty nor does he suffer from bad health, and there is no sign of over-strain. When he reaches the twelfth year, seven of the above alarming features have completely disappeared. The more he approaches bodily maturity the more settled his style becomes and the rarer become the ominous features. At fourteen, when he has reached the climax of puberty, all nine of the features have disappeared, his writings are fluent, and his messages are fresh, unreserved, spontaneous and really humorous. It is not until this time that he develops courage frankly to reveal his utter unhappiness on entering dormitory life.—M. O. Wilson (Oklahoma).

338. Scheidemann, N. V., & Robinette, G. E. *Testing the ocular dominance of infants.* *Psychol. Clin.*, 1932, 21, 62-63.—The authors describe a simple method of testing ocular dominance, using a piece of paper with a circular hole in it about one-half inch in diameter. The method was successfully applied to children as young as 21 months.—J. T. Metcalf (Vermont).

339. Schlotte, D. *Beobachtungen über den Buchwunsch des jugendlichen Lesers.* (Observations on the choice of books by young readers.) *Päd.-psychol. Arbeit.*, 1932, 19, 51-76.—The purpose of this work was to study the development of the child's literary interest through his spontaneous choice of

books. The material was collected by means of large numbers of form-cards filled out by the librarians in the school reading-rooms, and giving, along with other information, the child's wish in asking for a certain book and his comments when returning it. The main findings were as follows: The age at which children begin to use the libraries is about 9 years. Before that, the "technical" difficulties are so great that the child cannot enjoy reading. The peak of attendance occurs at 12-13 years, with a sharp decline at 14-15 years. A remarkable "rage" for reading develops at 11-12 years. The reason most frequently given for ceasing to use the library was too many home duties. Definite stages of advancement are noted in the type of literature preferred. As the differences in developmental tempo of individual children increase with age, these stages become increasingly difficult to recognize, and the more sharply stamped personality draws literary interest in numerous directions. Picture books are preferred up to 9 or 10 years, and among older children also illustrations are a very important consideration. The high tide of interest in adventure is 11-13 years for both boys and girls. Indian and negro stories (*Uncle Tom's Cabin*) are favorites with German children. Instructive books, historical and scientific, are sought with increasing frequency by boys and girls of 13 and 14 years. The author's material does not show that the chief element in the choice of a book is the satisfaction of the elementary feelings (except among the older girls). Purely incidental factors—the binding, "a short book," etc.—play a large part at all ages. The most important factor in the choice of a book is the recommendation of school comrades. Younger children appear to remember only isolated points about a book which particularly please them. At about the end of the tenth year, however, the children begin to show differentiated judgments of both the content and presentation of a book.—*M. E. Morse* (Catonsville, Md.).

340. Seagoe, M. V. The transient child. *J. Juv. Res.*, 1932, 16, 251-257.—The transient children in the schools of Garvey School District, California, are the subjects of the study. These transient pupils, numbering about 20% of the total school population, tend to be retarded in achievement and grade placement and normal in intelligence, and to exhibit with relatively high frequency the more serious forms of asocial behavior. The author points out the significance of these facts for child guidance and for the interpretation of survey data involving comparisons of achievement scores made by each grade early and late in the year.—*H. L. Koch* (Chicago).

341. Simonides, B. [Children's lies, with special reference to lying at school.] *Vychov. listy*, 1931, 293-296.—In connection with an older work of Schoeps, Simonides discusses the different kinds of lies: the fantasy lie, which under lack of guidance for the child, may degenerate into a pathological phenomenon; the bragging lie, characteristic of the pre-pubertal period; the heroic lie, through which the child takes the blame himself to save another child

from punishment; and the defensive lie, which protects against inquisitive probing into his developing soul-life. Special forms of cheating connected with school are prompting, copying, and writing the correct answers in school books.—*M. E. Morse* (Catonsville, Md.).

342. Stevens, G. C. Autobiographical material concerning the childhood environments and the effects on the after-adjustment of one hundred college freshmen. *Amer. J. Orthopsychiat.*, 1932, 2, 279-303.—Autobiographical material by questionnaire, not complete but covering important pressure points, was secured from 100 college freshmen and 100 recidivist prisoners, all males. Higher in recidivist group than in student were: strict religious atmosphere and strict discipline in early life, fear of authority, incompatible parents, early problem or delinquent history. Higher in student group were: father comrade of child, solitary children, only children, advocacy of parental upbringing. "Changes in both groups stressed a greater understanding of the child."—*A. G. Reynolds* (Winchester, Mass.).

343. Tumlriz, O. Folgen sexueller Verführung. (Consequences of sexual seduction.) *Vjsch. f. Jugendk.*, 1932, 2, 181-185.—Premature sex experience between children of the same age does not have the bad consequences that are apt to follow seduction by an adult. A typical case is described in which complete character change was produced in a boy who at 13 had homosexual relations with an older student. This is attributed, however, rather to his extreme susceptibility to outside influences, which made him an easy victim, than to the outside factors themselves. A second case of character change in a 13-year-old girl is explained in part also by her own potentially strong sex drives, which were released by the experience and then overshadowed all other interests.—*M. Lee* (Chicago).

344. Waashburne, J. N. The impulses of adolescents as revealed by written wishes. *J. Juv. Res.*, 1932, 16, 193-212.—The study concerns the wishes admitted by about 1000 individuals, 9-25 years of age, in response to the request that they list their three principal wishes as well as all of the real and *sub rosa* ones that could be called to mind within a limited period of time. The group was composed in about equal degree of maladjusted and well-adjusted individuals, judgment as to adjustment having being made on the basis of one or another of the following criteria: test results, teachers' opinions, grades in deportment, or repeated ratings on behavior made by those interested in child guidance. It is concluded that the responses received were sincere, since anonymous and signed groups of papers yielded the same picture. The wishes, when classified, seemed not wholly interpretable in terms of inner drives. The two qualities which distinguished most clearly between the wishes of the well- and maladjusted were the degree to which attainment of the indicated goal involved sustained and definitely directed effort and the degree to which socialness was implicit in the

wish. Sex and age differences are reported in detail.—H. L. Koch (Chicago).

345. White, R. K., & Fenton, N. Item-validation of a test of inferiority feeling. *J. Ju. Res.*, 1932, 16, 231-245.—From the boys at the Whittier State School there were selected 25 who were judged by those school officials who knew them most intimately to be suffering badly from inferiority complexes and 25 who were judged to be normal. To these groups of boys was given a questionnaire composed of items selected from earlier inventories on the basis of apparent validity in diagnosing inferiority feelings as well as upon apparent definiteness, reliability, and simplicity. The degree to which the normal and inferior groups differed in their responses to each of 60 items was evaluated in terms of the critical ratio and the Kelley-Strong methods. It was discovered that those items dealing most obviously with relevant concerns, such as with self-pity or social maladjustment, were more valid than items dealing with sex matters, family relationship, health, tendency to depression, brooding, or day dreaming. The test, taken as a whole, did not differentiate well between the two groups of boys, though it did seem to locate the worst cases of inferiority feelings. Padding the instrument with meaningless items seems to have had little value in encouraging greater frankness on the significant items.—H. L. Koch (Chicago).

346. Wieg, E. L. Bilateral transfer in the motor learning of young children and adults. *Child Development*, 1932, 3, 247-268.—Two groups, 44 children, ages 66 to 78 months, and 17 adults learned specially designed relief mazes with right and left fingers and with right and left toes. The children were grouped in sets of four equated for IQ, CA, socio-economic status, sex, and maze learning ability as determined in preliminary adaptation trials in an entirely different maze. No effort was made to equate adult groups. Each individual of a set learned with a different limb. When learning was completed to a criterion of not more than 2 errors in 3 trials, transfer was tested for idle limbs in the same and in a mirror-image maze pattern. Results indicate that "speed is always greater for hands than for feet, and always indicates a condition of 'cross-gaitedness' by showing the superior hand to be diagonally opposite the superior foot. Greater accuracy is shown for the right side of the body for children and the left side for adults. Relative gain of speed is greater for the left side of the body for children and the right side for adults. Learning progressing clockwise shows greater accuracy than the counter-clockwise movement. The size of the transfer score seems to be determined in a large measure by the efficiency of the transfer limb, and to a lesser degree by the amount of effort exerted by the learning limb. Greater experience and general practice as demonstrated by the adult group in this study tends to produce greater ability for improvement and better

transfer scores."—F. D. McTeer (Detroit City College).

[See also abstracts 96, 132, 175, 218, 226, 252, 260, 261.]

EDUCATIONAL PSYCHOLOGY

347. Carroll, H. A. A standardized test of prose appreciation for senior high school pupils. *J. Educ. Psychol.*, 1932, 23, 401-410.—The Carroll Prose Appreciation Test is described. It "is based upon the assumption that the ability to appreciate literature can be measured by revealing the degree to which an individual discriminates among passages of varying worth. Its validity has been determined by two criteria: source and a consensus of the judgments of sixty-five experts, the correlation between the two being perfect. Its reliability, found for four hundred sixty-seven senior high school students, is $.71 \pm .016$. The amount of time needed for taking the test is approximately thirty-five minutes. The publisher is: Educational Test Bureau, Minneapolis, Minnesota."—J. A. McGeoch (Missouri).

348. Crawford, A. B. Forecasting certain college aptitudes. *Person. J.*, 1932, 11, 160-168.—The intellectual level of undergraduates in America is considerably lower than in Europe. While this is due in good part to our democratic ideals, colleges, without sacrificing the essentials of these ideals, can considerably improve their present methods of educational selection and guidance. Standards of general educability, as measured by scholastic aptitude tests, preparatory school grades and other factors, can profitably be raised. However, minimum general standards should be sufficiently flexible to allow for outstanding special abilities which may be measured by specific aptitude tests. On the basis of the latter should be determined the type of education to be followed. A program is suggested for the development and recognition of certain procedures for measuring both general educability and the special direction in which the individual's educational talents lie. Results of recent experiments along these lines at Yale are cited.—(Courtesy *Person. J.*)

349. Crawford, A. B., & Burnham, P. S. Entrance examinations and college achievement. *School & Soc.*, 1932, 36, 344-352; 378-384.—On the basis of studies carried on at Yale, the authors maintain that the College Entrance Examination Board examinations fail to afford a satisfactory index either of an individual student's all-round scholastic promise or of his specific competence in particular subjects. The examinations probably do operate to set standards for schools and serve in the prediction of scholarship as valuable supplementary evidence. High school grades correlate higher with college freshman grades than do grades received on the C.E.E.B. examinations. The mathematics and language aptitude tests given at Yale have, moreover, higher r 's with college grades in mathematics and chemistry, and English and history, respectively, than have the grades on the C.E.E.B. examinations in these specific subjects.

Including, furthermore, the C.E.E.B. examination grades in a battery of items involving high school grades, age, and scores on the two aptitude tests, raises the multiple correlation with college freshman grades only .02. The battery, it is clear, is far superior as a basis for the determination of admissions than the C.E.E.B. examination returns alone. In fact, the authors seriously question any dogmatic use of the examination results in the selection of college entrants.—*H. L. Koch* (Chicago).

350. Bells, W. C. "The effect of the 6-22-44-22-6 normal curve system on failures and grade values"—a comment. *J. Educ. Psychol.*, 1932, 23, 466-468.—A reply to Davis (*J. Educ. Psychol.*, 1931, 22, 636-640).—*J. A. McGeoch* (Missouri).

351. Fischer, A. Gedanken über Schuljahrseinteilung und Ferienordnung. (Reflections on the division of the school year and the arrangement of holidays.) *Arb. a.d. Psychol. Institut. München*, 1931, 2.—The disadvantages of past and suggested arrangements of the academic year in the various types of schools and in the several parts of Germany (with respect to date of opening, length and number of semesters, date of closing, periods of vacation, etc.) are contrasted with the advantages of a unified procedure for all schools, with the year extending from the middle of September to the middle of July, with holidays from the 22nd of December to the 7th of January, from the Friday before Palm Sunday to the Monday following Whit Sunday, and with the summer vacation of eight weeks.—*T. J. Snee* (Pennsylvania).

352. Freistadt, S. G. Spravochno-konsultatsionaya rabota v plane proforientatsii shkolnikov. (Vocational guidance in secondary schools.) Leningrad: L.O.O.D.I., 1931. Pp. 48. 60 kopecks.—This volume contains the attempt of the author to describe the organization of vocational training for students and graduates of secondary schools. This process in Russia is called "polytechnization" of schools. At first various inquiries were sent to pupils to learn what sort of information they wanted about vocational training, and on the basis of this, tables were designed showing the students the various types of training available, the length of the courses, the number of years necessary, the various types of skill needed, etc. The purpose of the service was to give information not about professions, but about various trades and skilled occupations which are sorely needed in the Soviet Republic. This is an attempt to orient the adolescent student to the large range of opportunities which are provided by the educational system of Russia.—*J. Kasanin* (Howard, R. I.).

353. Gros, R. Vierte Sondertagung für internationale Erziehungsfragen in Genf, 3.-8. August 1931. (Fourth meeting in Geneva for questions of international education.) *Vjesh. f. Jugendk.*, 1931, 1, 250-269.—This session of the Bureau International d'Education was attended by 77 representatives from Europe, Asia, Central America, and the United States. The purpose was to discuss ways of bring-

ing the conception of the League of Nations to the youth of the world and promoting the spirit of international cooperation. Gros devotes his report to summaries of the addresses of Piaget and Bovet, which were of special interest. Piaget's subject was the psychological introduction to international education. His thesis is that the child can grasp the nature of the common feeling and the fundamentals of socialized life only through experiences of cooperation in school. All instruction in world peace will be sterile if it is imposed by external authority and if the school lacks the ideal of cooperation and justice. The children of each generation must work out for themselves the experiences of solidarity. In the purely intellectual domain, solidarity is indispensable for the international education of children. Theoretical teaching is, however, valueless unless freedom of thought and discussion, and mutual respect, permeate the school. Bovet discussed the transformation of the fighting instinct in the interest of international education. Society has repressed the dangerous primitive manifestations of this instinct by regulation, prohibition, and tabus. The individual has the choice between subconscious repression of the instinct—with grave and perverse consequences to himself—and its sublimation. In the social development of western Europe, there are two ways of canalizing the instinct: war and sport. In the former, the state monopolizes the instinct of the individual. It forbids combat for personal interest, while making it a sacred duty for the advantage of the state. The educator will not try to repress the fighting instinct, but to sublimate it. Love of country can be raised to the level of love of humanity itself, which is one with the deepest religious feeling. So undeveloped are we as yet in this direction that we have no word for tenderness toward humanity as a whole. In conclusion, Gros remarks critically that unfortunately these problems are much more complicated in Germany than in Switzerland. German youth has not the objectivity of the fortunate nations which have experienced neither the war nor the post-war period. Outsiders cannot estimate the amount of preparation necessary for opening the soul of German youth to the spirit of international understanding.—*M. E. Morse* (Catonsville, Md.).

354. Hartson, L. D. The validation of the rating scales used with candidates for admission to Oberlin College. *School & Soc.*, 1932, 36, 413-416.—For about 500 students the following data were gathered: college freshman grades, high school grades, Ohio State University Psychological Examination score, and estimates on 11 items of a personal rating scale, each item of which had been rated by the student's high school principal, a teacher, and a friend. Ratings on intelligence, methods of study, attitude toward school work, industry, reliability, and use of spare time correlated significantly with scholarship, both high school and college, the relative degree being represented by the order of naming; whereas no appreciable relationship was apparent in the case of ratings on leadership, disposition, appearance, man-

ner, physical energy, and temperament. The personal estimates correlated better with high school scholarship than with college, those estimates given by the principals yielding higher r 's than those given by the other judges. The personal estimates, taken as a whole, yielded higher correlations with college grades than did high school grades or intelligence test scores. A combination of high school grades, intelligence test score and personal estimates proved to be a better basis for predicting college scholarship than any one or combination of two of the above items.—*H. L. Koch* (Chicago).

355. Kennedy-Fraser, D. Education of the backward child. New York: Appleton, 1932. Pp. 236. \$1.80.—*R. R. Willoughby* (Clark).

356. Kitson, H. D., & Stover, E. M. Measuring vocational guidance; a summary of attempts. *Person. J.*, 1932, 11, 150-159.—Workers in vocational guidance have made many attempts to evaluate objectively the effectiveness of their efforts. This article summarizes the investigations that have been made, giving briefly the essential points concerning each report. They are grouped as follows: studies concerned with the gathering of information about occupations; with imparting information about occupations; with counseling of individuals; with placement and follow-up. In spite of the many difficulties standing in the way of evaluation, a number of investigations show such favorable results that vocational counselors can find encouragement to continue their efforts.—(Courtesy *Person. J.*).

357. Langier, H., & Weinberg, D. Le facteur subjective dans les notes d'examen. (The subjective factor in marking examinations.) *J. de psychol.*, 1932, 29, 463-465.—The author found that a single professor who marked and remarked the same examination papers differed from himself on the two markings as much as he differed from his colleagues when they marked the same papers. Certain implications are discussed.—*N. L. Munn* (Pittsburgh).

358. Popp, W. Die Methode des fremdsprachlichen Unterrichts. Kritik und Reformvorschläge auf sprachpsychologische Grundlage. (Methods of foreign-language instruction. Criticism and reform proposals on the basis of linguistic psychology.) Leipzig: Teubner, 1932. Pp. xii + 200. M. 7.20.—*R. R. Willoughby* (Clark).

359. Schohaus, W. The dark places of education; with a collection of seventy-eight reports of school experiences. (Trans. by M. Chadwick.) New York: Holt, 1932. Pp. 351. \$2.75.—An inquiry into what is wrong with schools based upon the replies written to the editor of a Swiss educational paper who asked his readers, "From what did you suffer most at school?"—*R. R. Willoughby* (Clark).

360. Schwung, H. Zur Psychologie des Berufsentchlusses. (The psychology of choosing a profession.) *Zsch. f. angew. Psychol.*, 1932, 42, 1-67.—For four months the author was closely associated with twenty 14-year-old girls who were about to leave the public school. Acting as their vocational coun-

selor, she was able to observe in each individual case the factors involved in bringing about a choice of profession. The observations are classified under the following heads: inclination and ability, knowledge and ideas, values and aims, and will and environment. The possibility of marriage plays a considerable rôle in the decisions of these girls, who had just entered puberty.—*K. F. Muensinger* (Colorado).

361. Shepherd, J. W. Report of the Oklahoma College Placement Test in English—1931 results. *Univ. Okla. Bull.*, 1932, N. S. No. 537. Pp. 116.—*M. O. Wilson* (Oklahoma).

362. [Various]. State higher education in California. Report of the Carnegie Foundation for the Advancement of Teaching. Sacramento: California State Printing Office, 1932. Pp. 82.—*R. R. Willoughby* (Clark).

363. Wenzl, A. Zur Frage spezifischer Begabung für die Schulleistungen in der Mathematik. (On the question of specific endowment for school work in mathematics.) *Arch. d. Psychol. Instit. d. München*, 1931, 2.—With a view to determining the truth of a widespread belief in the existence and necessity of a special endowment for success in mathematics, which talent is thought incompatible with that for languages, a statistical analysis of the school grades of 600 children was made. A good correlation was found between mathematics and Latin, and a fair one between the former and French. That between mathematics and English was low, but on the other hand that between mathematics and Latin was higher than that between Latin and English. In only a very small group was a real difference between achievement in mathematics and achievement in foreign languages found. The author concludes that the belief in specialized endowments in these fields is unfounded.—*T. J. Snee* (Pennsylvania).

364. Wood, B. D., & Freeman, F. N. An experimental study of the educational influences of the typewriter in the elementary school classroom. New York: Macmillan, 1932. Pp. ix + 214. \$2.00.—Report on an investigation the purpose of which was "to study the nature and extent of the educational influences of the portable typewriter when used as a part of the regular classroom equipment in the kindergarten and elementary school grades." Eight public schools and eight private schools, some being used as control and some as experimental groups, cooperated in the study over a period of two years. The types of evidence used in measuring comparative educational gains between the control and the experimental groups were achievement tests (except in the kindergarten), children's writings, teachers' judgments, and the testimony of the children. The time spent at the machines was for the kindergarten and first grade 50-80 minutes weekly and in the remaining grades 90-130 minutes weekly. The experimental teachers' manual is printed in full. Although care was taken to make the control and experimental groups as nearly comparable as possible in all of the factors which could be measured objectively, it was

found that the experimental teachers had a very slight superiority over the control teachers, as judged by supervisor ratings. The results of the study follow: (1) The experimental children in the kindergarten and first two grades made excess gains in reading; in grades three to six the gain as measured by the Stanford Achievement Test was small but positive. In the second year the gain in the experimental group continued. (2) Considering the individual subjects, the most significant gains for the experimental group were noted in spelling, arithmetic computation, geography, word meaning, language usage, and paragraph meaning. Except for spelling, the subjects showing gains the second year were different. (3) The handwriting of the experimental group did not suffer on account of the use of the typewriter. (4) After one year the children were able to write as fast with the typewriter as with the pen. (5) The use of the typewriter apparently increased the quantity and quality of written expression. (6) The teachers "regard the typewriter as a valuable educative instrument," and the pupils "look upon the typewriter with marked favor." There is an appendix containing 19 tables.—*M. G. Willoughby* (Clark).

[See also abstracts 42, 312, 313, 322, 323.]

BIOMETRY AND STATISTICS

365. Dunlap, J. W. Fallible scores and the standard error of a difference. *Amer. J. Psychol.*, 1932, 44, 581-582.—Formulae are given for the standard error of a difference in the following cases: (1) when both of the measures give fallible scores and the two sets are correlated, (2) when both of the measures give fallible scores and the two sets are uncorrelated, (3) when only one of the measures gives fallible scores and the two sets are correlated, and (4) when only one of the measures gives fallible scores and the two sets are uncorrelated.—*M. N. Crook* (University of California at Los Angeles).

366. Ezekiel, M. "Student's" method for measuring the significance of a difference between matched groups. *J. Educ. Psychol.*, 1932, 23, 446-450.—The method, developed by Lindquist and Wilks (*J. Educ. Psychol.*, 1931, 22, 197-204; 205-208), for determining the standard error of the means of matched samples and of the difference between them is compared with the method presented by "an eminent English statistician" writing under the pseudonym of "Student" (*Biometrika*, 1908, 6, 1-25). "Student's" method is shown to require less computation than does the Wilks-Lindquist method and to give a more accurate measure of the reliability of differences.—*J. A. McGeoch* (Missouri).

367. Griffin, H. D. Nomogram for Blakeman's test for linearity of regression. *J. Educ. Psychol.*, 1932, 23, 460-461.—Holzinger's version of Blakeman's test is followed in the construction of the nomogram.—*J. A. McGeoch* (Missouri).

368. Holzinger, K. J. The reliability of a single test item. *J. Educ. Psychol.*, 1932, 23, 411-417.—

Formulae are derived for the standard error of measurement of a single item, and the relation of this standard error to that of a series of items is shown. The new formulae are designed to be useful in constructing tests composed of items of known reliability, in predicting the final reliability of a number of such items when combined, and in "appraising the reliability of tests of different lengths by reducing the measure of reliability to the average item basis." An experiment to verify the formulae is briefly described.—*J. A. McGeoch* (Missouri).

369. Nettelblad, A. Några ord om siffrornas vittnesbörd vid samlandet av medicinska rön. (Some remarks on the use of statistics in the interpretation of medical data.) *Svensk Läkart.*, 1932, 29, 953-964; 977-984.—Deploing the lack of a thorough knowledge of statistics often apparent in medical literature, the writer gives an exposition of elementary statistics with examples from the medical research field. Four references.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

370. Riebesell, P. Mathematische Statistik und Biometrik. (Mathematical statistics and biometry.) Frankfurt a M.: Salle, 1932. Pp. 59. M. 2.40.—*R. R. Willoughby* (Clark).

371. Rosenow, C. Statistics never equivocate. *J. Educ. Psychol.*, 1932, 23, 465-466.—A reply to Conrad (*J. Educ. Psychol.*, 1932, 23, 147-149) concerning the personal equation factor in ratings.—*J. A. McGeoch* (Missouri).

372. Wherry, R. J. A modification of the Doolittle method: a logarithmic solution. *J. Educ. Psychol.*, 1932, 23, 455-459.—Doolittle's adaptation of Gauss's method for the solution of normal equations is satisfactory for machine calculation but very burdensome when a machine is not available. Wherry's modification is suited to hand calculation and gives results of approximately the same mathematical accuracy.—*J. A. McGeoch* (Missouri).

[See also abstract 381.]

MENTAL TESTS

373. Armstrong, C. P. Some performance test norms for children. *Psychol. Clin.*, 1932, 21, 39-48.—To test their availability for examining public school children the Army Beta and the Army Performance Scale (abbreviated form) were given to over 400 New York City and Westchester County school children in grades 4 to 8 inclusive. For comparison the Otis Group Test for grades 4 to 8 was also given. The Performance Scale was found to correlate .629 with the Otis Scale. Beta gave a correlation of .633 with the Otis. When the scores made on the Performance Scale by children of different ages are compared with Army norms it is found that the school children exceed the Army norms up to the age of 12, where they conform closely. Beyond the age of 13 they tend to fall below the norms. On Beta the children considerably exceed the Army norms up to the age of 13. Beyond 13 they approxi-

mate the norms fairly closely. The author concludes that the Army Performance Scale is expedient for clinical practice, provided results are interpreted in the light of facts brought out, but recommends a re-standardization of the Beta if it is to be used for this purpose.—*J. T. Metcalf* (Vermont).

374. Courthial, A., Van de Stadt, I., & Claparède, E. *Rapidité et qualité*. (Speed and quality.) *Arch. de psychol.*, 1932, 23, 193-229.—In the introduction Claparède voices some of the numerous questions raised by the complexity of the problem of individual performance considered under the aspects of speed, quality, and duration. He treats here of the reciprocal influence of quality and speed, of speed and quality as individual characteristics (typology), and of the development and educability of speed and quality. These questions are all the more significant since most of the tests are limited as to time, and the performance of the individual is most often measured by the speed of work. Is the quick individual more intelligent than the slow, is his speed constant, is it related to the quality of his work? A review of the history on many of these points shows us that those who have occupied themselves with these problems have not agreed among themselves. However, it seems clear (1) that speed is a constant quality, (2) that for a given individual the quality of the work is much more variable than the speed, (3) that the relation between speed and quality appears to be a function of the difficulty of the tests, and (4) that there is little relation between speed and intelligence. The above authors have given two tests to 54 boys and 23 girls between the ages of 16 and 21 years, the first test consisting of disordered numbers to be rearranged in correct order, and the second test being a test in addition, subtraction, multiplication and division. The elaboration of the results has demonstrated differences between the sexes, constancy of speed in the repetition of the first test, the different categories of arithmetical operations, and constancy of the quality of work. The coefficients of correlation show that there is a relation between the speed of a subject for one category of operations and his speed for another category, while there is no relation between the accuracy of the work in the different categories. However, the constancy of speed is lowered considerably when the results in the two tests are considered. Also, there is only a low correlation between speed and quality. Finally, the rapid type is more often accurate and the slow type inaccurate. These results are both in accord and in disagreement with those of other authors. These discrepancies suggest that, aside from the question of choice of tests and method, the relation between speed and quality should depend on a factor such as the aptitude of the subject in the function tested. Bibliography of 66 titles.—*M. R. Lambercier* (Geneva).

375. Graf, O. *Zur Frage der Konstanz bei Intelligenzprüfungen nach verschiedenen Prüfungssystemen*. (The problem of constancy in intelligence testing by different systems.) *Psychotechn. Zsch.*, 1932, 7, 84-88.—The degree of intelligence is partly

dependent upon the particular tests. Different types of intelligence tests may cause marked changes in an individual's score; this Graf showed by testing 100 policemen with three different kinds of intelligence tests, the Graf, the Beltz, and the Bobertag-Hylla tests. The fundamental difference between these tests lies in the arrangement of the questions and the stress upon different kinds of material. The Graf test consists of several separate parts, each forming a distinct unit; the other two present the different kinds of material in mixed order. According to the author's analysis of each test question the Beltz test unduly stresses arithmetic, while the Bobertag-Hylla test over-emphasizes logical thinking. For purposes of obtaining comparable scores each test was regrouped according to the kind of items and scored on a 5-point scale by a special method developed by Rupp. The correlations between the measurements from the different tests, which were thus made comparable, were: .40 for G:B, .32 for G:BH, and .54 for B:BH. Thus, using different types of tests, an individual may obtain a different rank for each. This interchange of rank is determined by the degree of suitability of the test to his particular ability, such as ability for arithmetic, for logical thinking, and for change of set. That test which is best suited to his general make-up will give the best results.—*C. Burri* (Chicago).

376. Hales, N. M. *An advanced test of general intelligence*. Melbourne: Melbourne Univ. Press, 1932. Pp. 64. 3/6.—This report gives a full account of the revision, extension, and standardization for Sydney (Australia) of the American Army Alpha Test.—*J. C. Spence* (Clark).

377. Hargan, J. *The relation of continuous association scores to mental age of adults*. *Psychol. Clin.*, 1932, 21, 55-58.—The test of association, as given in year X of the Stanford-Binet scale, was used with a slight modification of instructions. Results are presented based on the scores made by 240 adult whites and 71 negroes in Sing Sing Prison. With the whites the results of the association test correlated .58 with mental age. A table is presented for the prediction of mental age from the score on this test alone.—*J. T. Metcalf* (Vermont).

378. McElwee, E. W. *Standardization of the Stenquist Mechanical Assembling Test Series III*. *J. Educ. Psychol.*, 1932, 23, 451-454.—The standardization is for boys 6 to 9 years of age. "There is a definite relation between the mechanical performance and the chronological age. The correlation between mechanical ability and intelligence is negligible. Dull boys made a higher mechanical score than bright boys of the same chronological age. Older boys of inferior intelligence made a higher mechanical score than younger boys of the same mental age."—*J. A. McGeoch* (Missouri).

379. McElwee, E. W. *An analysis of the Binet test of naming words*. *Psychol. Clin.*, 1932, 21, 59-61.—The continuous association test was given as a part of the regular Stanford Binet, with the examiner

taking down the words named in shorthand. The subjects were 200 school children. The results show few association sequences, though in some cases children gave groups of names of things belonging to the same class.—*J. T. Metcalf* (Vermont).

380. Phillips, A. An analytical and comparative study of the Binet-Simon test responses of 1,306 Philadelphia school children with an attempt to evaluate and grade the separate tests. *Psychol. Clin.*, 1932, 21, 1-38.—The 1,306 children were drawn from three grades, as follows: 406 from grade III, 500 from grade V, and 400 from grade VI. The data are analyzed to show the relationship between the degree of acceleration or retardation and the percentage of passes on the tests. Tables are also presented in which the tests are arranged in order of difficulty. The author gives reasons for preferring Witmer's method of placing tests in appropriate year-groups to those of Binet and Terman. The study further reveals a much greater proportionate increase in passes between grade III and grade V than between grade V and grade VI. The author suggests that during the former interval the child "makes such rapid growth intellectually that the ten year level might be called the intellectual level."—*J. T. Metcalf* (Vermont).

381. Stagner, R. Scoring weighted item tests; a short-cut method. *Person. J.*, 1932, 11, 174-176.—A method is described whereby multiple-weighted tests can be scored with a considerable saving of time and probably increase in accuracy as compared with the use of stencils. This method consists essentially of the following steps: (1) eliminating negative weights by adding a constant to all weights; (2) arranging these weights on a mimeographed sheet in

such fashion that all the weights corresponding to the answer marked by the subject can be underscored by a single stroke of a pencil; (3) adding the underscored figures by column to give the total score. The result differs from the score obtained from positive and negative weights by a fixed amount, and this amount can be subtracted from the total score, or norm tables can be easily adjusted to the new score values by adding this fixed quantity to each raw score value given in the table of norms. The method requires no equipment other than mimeograph and adding machines.—(Courtesy *Person. J.*).

382. Tryon, R. C. So-called group factors as determiners of abilities. *Psychol. Rev.*, 1932, 39, 403-439.—In a previous paper the author examined ten experiments on interrelation of abilities by the tetrad analysis, and concluded that the evidence failed to support Spearman's two-factor theory and necessitated a theory of multiple factors. In this paper he examines the assertion of the two-factorists that they had satisfactorily rationalized the too-large tetrad differences into consistency with the "G" theory by postulating a number of disturbing group factors. After examining several reported studies by two-factorists (Spearman, Davey, Stephenson, Garrett, etc.) he finds that the tetrads do not fall into any such simple types as to indicate the existence of a few clear-cut factors. He suggests that the two-factor hypothesis must be shown not only to be statistically consistent with the facts, and to make psychological sense, but must also be consistent with the facts of biology and of genetics determined independently. He believes that such consistency is lacking.—*A. G. Bills* (Chicago).

[See also abstracts 331, 345.]



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